

THE CALCUTTA REVIEW.

NO CXX.

ART I.—FAMINE AND STATE DUTY.—(*Independent Section.*)

In vain our pent wills fret,
And would the world subdue.
Limits we did not set
Condition all we do ;
Born into life we are, and life must be our mould.

The world's course proves the terms
On which man wins content ;
Reason the proof confirms ;
We spurn it, and invent
A false course for the world, and for ourselves false powers.

I say : Fear not ! Life still
Leaves human effort scope.
But since life teems with ill,
Nurse no extravagant hope ;
Because thou must not dream, thou need'st not then despair !

MATTHEW ARNOLD.

It may, indeed, be difficult for those who have but little faith in the invisible to follow out a principle unflinchingly, in spite of every threatening evil—to give up their own power of judging what seems best from the belief that that only is best which is abstractedly right—to say, 'although appearances are against it, yet will I obey the law.' Nevertheless, this is the true attitude to assume ; the conduct which it has been the object of all moral teaching to inculcate ; the only conduct which can eventually answer.

HERBERT SPENCER.

THE gap which separates the Government of British India from its subjects is, probably, wider than that which divides the rulers and the ruled in any other part of the world where the task of civilising an inferior race is being attempted by foreigners upon any considerable scale. Or, if

the difference which exists between ourselves and Hindus be not greater than that between the French and the Arabs of Algeria, or between the people of Central Asia and their Russian conquerors, it is at any rate brought into stronger relief by the higher theory of Government duty which we have adopted. Our errors of omission and commission are, indeed, sufficiently numerous and grave; but after all has been said, they are the result rather of ignorance and miscalculation than of deliberate and selfish disregard of the interests of the people, which is probably more than could be affirmed of any similarly situated body of foreigners. And it is this difference which makes us practically feel the width of the gulf which divides us from the masses. So long as the only care of a ruling race is to keep down and make profit out of its subjects, the inferiority in civilisation of the latter is a cause of satisfaction rather than of regret. But in proportion as a desire to elevate the ruled enters into the motives of the ruler, does the disparity of their respective civilisations become a source of anxiety and embarrassment. The schoolmaster, in a word, finds difficulties where his predecessor, the slave-driver, found none.

The difficulties which spring from this want of homogeneity between ourselves and our subjects must necessarily affect, whether in the way of narrowing or extending, the limits of Governmental action in India, as compared with other countries in which a greater degree of such homogeneity exists. When one reflects how much has been written in England, not to speak of France and Germany, on the duties of the State, it seems somewhat strange that no attempt has ever, so far as we are aware, been made to lay down anything like a rationale of those duties in India. It is, of course, true in a general way that where the spirit of private enterprise is weak, the circle which may be advantageously filled by the activity of Government is proportionally large; but this commonplace, though it covers a good deal of the difference between the position of an European and of a progressive Asiatic Government, does not seem an adequate formula for the expression of the whole of that difference. Speculation on so apparently abstract a subject will doubtless appear a sufficiently unprofitable pursuit to most members of this exceedingly practical community. But if it can be shown to be possible to lay down any reliable principles, by conformity or non-conformity to which any given enterprise on the part of the state might be safely approved or condemned, why, then, the most "rugged Brindley" of us all will hardly deny that the subject may really possess considerable practical importance. Such an enquiry should not be confounded with the "constitution-mongering" of which most Englishmen have so healthy, though perhaps somewhat exaggerated, a dislike. The attempt to impose

a paper constitution on a nation, and the attempt to determine what things a Government may, and what things it may not, advantageously do, "are hardly even akin." The following pages have no pretensions to contain anything like a complete theory of State duty in India, but the writer ventures to hope that they may do something to attract attention to the subject, and he feels quite sure that such attention has never been more needed at any period in the history of British India than the present.

Twenty-four years ago, Mr. Herbert Spencer in his "Social Statics"—perhaps the most profoundly original treatise on social philosophy ever written in England—laid down certain reasons for believing in human perfectibility, from which he deduced a theory of *laissez faire* in its extremest form; and the inadequacy of these reasons, when regarded with reference to this and other backward countries, seems to illustrate a radical distinction between the sphere of Government action in England and in India. The passage is already so compressed that it must be quoted entire.

"All imperfection is unfitness to the conditions of existence.

"This unfitness must consist either in having a faculty or faculties in excess; or in having a faculty or faculties deficient, is or in both.

"A faculty in excess is one which the conditions of existence do not afford full exercise to; and a faculty that is deficient is one from which the conditions of existence demand more than it can perform.

"But it is an essential principle of life that a faculty to which circumstances do not allow full exercise diminishes; and that a faculty on which circumstances make excessive demands increases.

"And so long as this excess and this deficiency continue, there must continue decrease on the one hand and growth on the other.

"Finally, all excess and all deficiency must disappear; that is, all unfitness must disappear; that is, all imperfection must disappear." (Social Statics. Part I., Cap. II.)

Now, the most obvious exception to be taken here is to the definition of "imperfection" contained in the first of the six sentences which we have quoted. Whether unfitness to the conditions of existence is or is not, imperfection, must depend entirely on the nature of those conditions. Were it otherwise, there could be no such thing as absolute perfection, either actual or conceivable, for, as the nature of conditions varies infinitely, it would be necessary that the perfection which consists in adaptation to them should vary also, and the notion of ethical perfection would be altogether excluded. The fallacy appears to lie in the ambiguous use of the word "perfection" throughout this portion of Mr. Spencer's work the term being first employed to indicate physical adaptation; and

secondly, moral excellence. A Hottentot, or a North American Indian, is, probably, more closely adapted to the conditions of existence in his own country than a dweller in London or Paris to the conditions which prevail in those cities; and for this reason, that the conditions of savage are very much more simple than those of civilised life, and therefore adaptation to them is much more easy. Moreover, the former have existed unchanged for a very much longer period than the latter, and, as practice has a tendency to make perfect, the savage would naturally be more complete and less imperfect *quâ* savage, than the civilised man, *quâ* civilised man. But an average Londoner or Parisian would hardly, by Mr. Spencer at least, be accounted a less perfect being than an average Hottentot or North American Indian. Similarly, a fruit-tree transplanted from a garden into a field and left to nature, will in course of time adapt itself to its new environment, and cease to bear edible fruit; but it could scarcely be considered a less imperfect tree when the deteriorating process was complete than when it had only just begun. So with an individual man or race of men; given permanent and degrading conditions, a permanently degraded type will be produced.

Nor, again, can the assertion that "a faculty to which circumstances do not allow full exercise diminishes," be accepted as by any means universally true. Indeed, it is not easy to understand how such a sentence could have been written in the face of the tremendous fact of the existence of unprogressive and even retrograde races. A faculty, in the sense in which Mr. Spencer employs the term, must be held to include an appetite, and an appetite, hunger for instance, does not always diminish when circumstances do not allow it full play, or does not diminish sufficiently to remove the discrepancy between constitution and conditions. Appetite for food cannot, consistently with the continuance of life, be diminished below a certain not very elastic *minimum*, and food does not necessarily become more plentiful because more of it is needed. It is only where the actual supply falls short of this *minimum* demand to a very considerable extent that death steps in to cut the Gordian knot. Within these limits there is an ample margin for the play of this permanent discrepancy of the existence and operation of which India is a sufficient illustration.

Neither, again, does "a faculty on which circumstances make excessive demands" always increase. Extreme poverty and liability to frequent dearths and occasional famines render needful the faculties of foresight and economy. The great mass of the people of India are, and for hundreds, if not thousands of years, have been extremely poor, and exposed to dearths and famines, but they have certainly not acquired much foresight, and their extravagance at marriages and funerals is notoriously excessive.

It is probable that Mr. Spencer was thinking only of European societies when he wrote the passage in question, and in the most progressive, at any rate, of those societies, this alleged spontaneous tendency toward amelioration is sufficiently real to go far to justify the thorough going theory of *laissez faire* which he derives from it. The merits of the theory as applied to England, need not be discussed here; but the fact that systematic non-interference would not in England be incompatible with progress—though it might, temporarily, at least, slacken its pace—whereas, if applied to India, it would, if experience may be trusted, put an entire stop to progress, brings into strong relief the difference between the duties of the State in the two countries. And if this is so, if *laissez faire* is practicable, and, on the whole, desirable in England, while it is neither one nor the other in India, there must be a reason for its being so; and it is important to grasp clearly the true nature of the distinction.

Mr. Mill has somewhere observed that "the grounds of a principle, when well understood, usually give a tolerable indication of the limits of it;" and the remark may be of service here. It will, probably, be admitted that Governmental interference and indeed the existence of Government at all, is always, in itself, an evil. And this is true even of the least objectionable forms of interference, namely, those which aim at the protection of person, property, and character. It may be, often is, the lesser of two evils; and as long as imperfection exists, as long as violence and dishonesty and other modes of wrong-doing prevail, so long will the exercise of the collective powers of society for purposes of repression and regulation be indispensable. But it should never be forgotten that every such exertion of power is in itself an evil, inasmuch as it interferes with the fundamental principle upon which society is based, "liberty of each limited only by the like liberty of all." With the possibility, however, of ultimately dispensing with Government altogether, we have no present concern. It can be but a dream of the future, an ideal which may perhaps, be realized if the world lasts long enough. All we can, hope to do is to reduce the sphere of State interference to the smallest extent which may be found compatible with the general advantage. This, indeed, is nothing new, but what has been said above seems to indicate the grounds of the obvious maxim that the sphere of Governmental action varies inversely with the degree of advancement attained by the community, and, moreover, points the way to the somewhat less obvious principle that it also varies inversely with the degree of homogeneity which prevails between the Government and its subjects or constituents.

A country which has once attained a certain stage of advancement, which has outgrown the superstitious reverence for custom

and the other obstacles which beset the growth of primitive societies may with tolerable safety, and indeed in the main, *must* be trusted to continue its progress without the adventitious stimulus of State interference. A country, moreover, of which the civilisation is indigenous and has been worked out by itself from within, *can* receive comparatively little aid from its Government, which will be so homogeneous with its subjects as to have little assistance or advice to offer them which they cannot obtain as well or better elsewhere. All that such a Government can do is judiciously to adjust and distribute the actually existing forces. The Governments, for instance, of the most advanced countries of Western Europe, England, France, and Germany, have no pretensions to do anything more than represent the average intelligence of the respective peoples.

But in India, where civilisation, in the modern sense of the term, is an exotic, the secret of growing which is known to its foreign rulers alone, the duty of the State is considerably wider. And the key to the difference appears to be in the fact that in India long standing wants do not bring about their own satisfaction. Continued hunger does not produce a sufficiency of food; uncertainty of subsistence does not produce foresight; urgent, though half-unconscious, need of exact scientific instruction does not give birth to the education which alone can satisfy it. Unless these and countless other reforms can be set on foot by the State, there seems no reasonable prospect of their ever being set on foot at all. Mere tranquillity, simple preservation of the peace, will not bring about progress, unless a society has in itself the germ of growth. And to implant that germ, to impart an impulse towards civilisation, to inoculate the people with something of the modern spirit, is the work which the Government of India has got to perform. It must, on the one hand, so mould outward circumstances, and on the other, so tutor the intelligence of the people, that the two may act and re-act on each other until they between them generate a force sufficient to lift the masses out of the ever-deepening pit of stagnation in which centuries of immobility have left them. The first indispensable conditions of success in this attempt are the maintenance of order and tranquillity, and the administration of equal and easily accessible justice. The fulfilment of these conditions secures us a medium in which the real work of education and enlightenment may be done; and without such a medium that work could no more be carried on than certain experiments could be performed without the previous exhaustion of the atmosphere by an air-pump. Thus, on the one hand, to keep the field of our operations free from disturbing agencies, and, on the other, to carry on the operations themselves, is of itself, one would think, a sufficiently complex

task. But there is at present a very strong tendency to add to its complexity, and that to a degree which threatens to render it absolutely impossible. The writer ventures to submit that it is no part of our duty, rightly comprehended, even if it were not altogether beyond our power, to save the people from the penalty of disobedience to economic laws. Tonics and solvents, not anodynes and opiates, are the remedies required. And by tonics and solvents is not meant vexatious interference with the details of daily life and with personal freedom, but measures calculated to awaken intelligence. Economic foresight is the most pressing need of the people of India. The logic of facts has been appealing to them to learn the lesson for many a long century, and appealing in vain, for they lacked, and still lack the capacity for understanding its teaching. It is for us to point out to them the nature of the law, not to attempt the desperate task of interfering with its working. It is our duty to help them to make life tolerable for themselves while they live, but it is distinctly not our duty to keep them alive; in the first place, because it is out of our power to do so consistently and continuously; and secondly, because, even if it were in our power, success would be ruinous to the very qualities, already grievously deficient, on which all their hopes of future progress depend. To come to the point:—the British Public at home, and the Government of India here, have arrived at the conclusion that it is the duty of the State to see that no human being ever dies for want of food. Now is this a tenable position? The question is, perhaps, the most important that has ever been raised in India, whether the answer to it be Yea or Nay.

That the question should have been raised sooner or later was inevitable, and a mere matter of time. The causes which have now brought it to the front are mainly two: first and most important, the growth among ourselves of humanitarian feeling; and secondly, the actually increasing frequency of scarcities of food, arising from increased density of population and other minor economical agencies. As for the growth of philanthropic sentiment, it has had its origin in England, and is a tendency which we should be the last to deplore or depreciate. The existence among us of a stronger sympathy for the sorrows of mankind, apart even from any practical effect which it may produce in diminishing those sorrows, is by its ethical effect in widening and deepening the moral range of those who feel it, a distinct gain to humanity. The number of those to whom an ever-present consciousness of the misery of men is their own chief sorrow is small enough absolutely, but it can hardly be doubted that in England and other civilised countries, it is greater now than it has ever been hitherto. The actual sum of suffering among the poorer classes is, probably, much

the same now as in former ages, but the richer classes know more of it. Newspapers, much of modern poetry, and Dickens's novels, are among the causes which have brought it home to us as it has never been brought home before. This increased sensibility undeniably has its dangers, but in itself it is a good, and only needs wise guidance to bring forth good results. With regard to the second cause which has brought into prominence the question of State duty in times of dearth, *viz.*, the more frequent recurrence of these periods, its reality may perhaps be called in question, and it is impossible to speak of it without considerable diffidence. Whether famines really are more frequent now than they were a century or even half a century ago, is not easy to ascertain, owing mainly to the comparative indifference with which they were then regarded by Government, and the consequently slight record which has been preserved of them. A passage from Mr. C. E. R. Girdlestone's Famine Report is sufficient evidence on this point:

"In former days, reports were neither so detailed nor so systematic as they are now. Famines and such like catastrophes were accepted as necessary evils, to be alleviated as far as possible at the time, and to be forgotten as soon as the emergency had passed. Though more than one Collector in his correspondence during the spring of 1804 casually mentions that he had adopted measures of relief on account of the prevailing distress, not a single one seems to have recognized the advantage which it might be to posterity to know in what manner he was providing for the destitute, or what was the price of wheat in his neighbourhood. Such was the spirit of the period that these were evidently regarded as unimportant items for a public letter. The realization of the revenue was then the all-absorbing topic, and the correspondence represents faithfully, not to say exclusively, the alternate hopes and fears in this respect. So long as a man could say that he had collected all that was due on behalf of Government, he might reckon on escaping censure; but if instalments were unpaid and balances were accruing, he was fortunate if he could devise reasons which would reconcile his superiors to the emptiness of his treasury, and no excuse that he had been looking after the wants of the poor and helpless was likely to compensate in their eyes for his disregard of the pecuniary interests of the State."

The attitude thus depicted is certainly inferior in moral worth to that of the present generation of officials. But it is a mournful truth, that the course of conduct resulting from ignorance and insensibility often resembles far more closely the line of action which would be suggested by keen sensibility coupled with complete knowledge, than that which is prompted by newly awakened consciousness united with imperfect intellectual

appreciation of facts. It may be that the present is a case in point. But whatever the nature of the answer which experience may ultimately return to the question, whether it is the duty of the State to find food for the hungry in times of dearth or not, it seems clear that that question has, for the present, at least, been decided in the affirmative without much attention being paid to the arguments which may be adduced on the opposite side. And it may, perhaps, be urged on behalf of the course that has been followed, that the Government of India, placed in a perplexing position which demanded immediate action, has acted on its instincts, and adopted the principle of saving life regardless of expense. It may, indeed, be replied that the point of State duty with regard to famine is one upon which the Government of any country, but especially of a country like India, should have its mind definitely made up without waiting for circumstances to force it to a conclusion. Very possibly, however, the course pursued has been the result of deliberate conviction. But even in that case it might be well that the question should not be regarded as finally settled beyond all possibility of re-consideration. There is no disguising the enormous importance of the principle at stake, and it is surely well that we should make up our minds clearly as to what its adoption in permanence may involve. Its abandonment when once fairly embraced will be infinitely difficult, and before thus embracing it we may well call to mind the words of Goethe, as applicable to the State as to the individual: "Happy is he who is not compelled to reconcile himself with fate by altering the whole course of his previous life." But no intelligent decision can be arrived at without hearing the *cons* as well as the *pros*, and even these—and they are, probably, many—who hold that the subject does not admit of two opinions may consent, if they will call to mind the practice of the Roman Church when about to canonize a saint, to hearken for a little even to one whom they will doubtless regard as an *advocatus diaboli*.

The case under consideration may be briefly stated thus:—British India contains a population of about one hundred and eighty millions, principally agriculturists, spread over an area almost as large as Europe without Russia, and including very great varieties of soil and climate. This population has always, so far as is known, been subject to frequent scarcities and occasional famines; and, indeed, the extent of the country is so great, and its soil varies so widely, that hardly a year passes without a dearth, or five years without a famine, in some portion or other of the empire. The principal characteristics of the great mass of the people, of Northern India at any rate, are dense ignorance, intense conservatism, and extreme poverty. They are generally frugal, and all but the higher castes are sufficiently industrious, but all

classes are occasionally very extravagant. Economically speaking, the population in nearly all the regularly-cultivated and long-settled regions is redundant, *i.e.*, is more than sufficient to make the most of the soil, and the only checks on its increase have been want of food, war, and disease. The second cause has of late years almost entirely ceased to act, and the operation of the third is supposed to have been considerably diminished. Be that as it may, by far the principal check on population is, at present, want of subsistence; and there can be little doubt that population has, during recent years, considerably increased, though cultivation has, probably, extended in a still larger proportion. Now, for some time past, and more especially during the last ten years, the moral sensibility of the educated English Public has become considerably more acute than it was before, and being naturally very much shocked at the horrors of starvation, they have laid down the principle, that in any region where famine may be officially held to exist, no human being shall be permitted to die for want of food, if a free expenditure of State taxes—raised, it may be observed, with considerable difficulty from the people—can prevent it. In other words, they have determined that the whole population of this enormous country shall be compelled to mutually ensure each other's lives against the contingency of famine in any part of it. The question necessarily arises:—What is likely to be the result of the consistent application of this novel principle?

There are two main grounds on which this principle may be impugned; firstly, that to carry it out consistently is beyond our power; and secondly, that even if it were within our power, success would be, if possible, more disastrous than failure. Let us try to deal first with the question of practicability. We have no wish to make capital out of any errors of detail which may have been committed in the treatment of the late famine, from which Bengal has just emerged. All that is here contended for is the principle at stake, and we desire to state the case against us as strongly as possible. Let it be assumed, then, that in future scarcities operations will be conducted as economically as possible, and “demoralization” of the people avoided so far as may be. The expenditure incurred during the twelve months from October 1873 to October 1874, has been estimated, roughly, indeed, but by good authority, at six millions. It is not likely to be less, and may be more. Let it be conceded that one million of this amount may be regarded as expended in consequence of miscalculations which the experience that has been now gained would prevent from occurring in future. Five millions will thus be left as the genuine *bond fide* famine expenditure in Bengal from 1873 to 1874. Now, how often may it be anticipated that this drain to the resources of the State will occur? Let us turn again to

Mr. Girdlestone's Report. We there read that if famine be defined as "want—though only felt over a limited area—provided the scarcity reaches starvation point," there have occurred no less than twelve famines during the last seventy years, or rather more than one famine year in six. The years in question, as given by Mr. Girdlestone, were 1803-4, 1813-14, 1819, 1825-26, 1827-28, 1832-34, 1837-38, 1860-61, 1865, and 1867, to which must be added 1868-69, and 1874. Three of these, at any rate, were calamities of the first-class: those of 1803-4, 1837-38, and 1860-61. And all these, it should be remembered, occurred in the North-West Provinces alone. There have also been famines in the Punjab, Rajpootana, Orissa, and Bengal Proper, to say nothing of Oudh.

Now, what is likely to be the expenditure incurred in the course of the next ten years, if we steadily carry out the principle that no life shall be lost for lack of food? The subject does not admit of anything but an exceedingly rough estimate, but that to be now proposed will, probably, not be considered to err on the side of extravagance. Let us assume that once in every ten years we shall have to deal with one first-class famine, involving an expenditure of five millions, one second-class famine causing a drain of three, and one-third class famine of two millions, and an annual scarcity in some part or other of the Empire, requiring an expenditure of one million. Our famine bill will thus amount to two millions yearly, twenty millions in each decade, two hundred millions in each century. Now, are the finances of the Empire capable of supporting this strain, which, as will be noticed hereafter, is probably much less severe than that which would be actually put upon them? Let us consider a little the relative positions of England and India. The United Kingdom contains, roughly speaking, thirty millions of inhabitants, who pay without any serious difficulty taxes aggregating about seventy millions yearly, or two pounds six shillings and eight pence a head. British India has a population of about one hundred and eighty millions from whom is collected, with great difficulty, a revenue of about fifty millions sterling, of which twenty-eight millions or so are not taxes at all in the English sense of the term; twenty-one millions of land revenue being really rent, which would, in England, be paid to landlords instead of to the State, and seven millions, the average opium revenue, being really levied from the Chinese. This leaves twenty-two millions of actual taxation raised from one hundred and eighty millions of people, or about half a crown a head. So far, then, as the wealth of a country can be estimated by the ability of its people to bear taxation, the wealth of India is to that of England as two shillings and six pence to two pounds six shillings and eight pence, or less than one-eighteenth

When it is considered that India pays her half crown a head with very much greater difficulty than England pays her two pounds six shillings and eight pence, some notion may be obtained of the intense poverty of the former. The famine expenditure, calculated at its lowest rate of two millions yearly, would thus add nearly nine per cent. to the taxation at present actually paid by the people. Would the occasional saving of life in different parts of the Empire, which might be effected by the money thus raised, be an adequate compensation to the tax-payers of the Empire generally, for this increase of their burthens? The rich in India are so very few, and so vast a majority are exceedingly poor, that no tax can really draw which does not fall upon the poor, *i.e.*, the huge majority. It must not be forgotten that there is such a thing as

propter vitam vivendi perdere causas.

The life of the masses in India is not a very desirable thing at best, and the tendency of the principle under discussion is distinctly to render this life still less desirable than it actually is, while largely increasing, or at least saving from diminution, the number of those who live it. If successfully carried out, it would exempt the people from liability to an occasional short, sharp agony, while making their average daily life very much harder and more pinched. Any one who knows how terribly near the vanishing point the comforts of life for the masses already are, and how terribly hard it is to raise their standard of living can hardly resolve, "with a light heart," to sink that standard still lower. If it is a terrible thing to die, it may be still more terrible to live, and it may well be maintained that the increased taxation which the new principle involves will do more to diminish the sum of happiness in India than the results attained by the expenditure of that taxation will do to increase it.

Nor is this by any means the whole case against the practicability of State relief in time of famine. Hitherto we have been proceeding on the hypothesis that the new arrangement will continue to work under the same conditions as those under which it was started. This assumption is demonstrably incorrect. If the measures of relief succeed at all in the object aimed at, they will prevent the population from being kept down by those occasional scarcities which have hitherto been the main check on its increase. The more effectual the relief, the greater will be the number of persons to be saved at the next occurrence of famine in the same region, and the greater, consequently, will be the necessary expenditure. We shall thus have on each occasion, when relief is found requisite, a population more dense, and therefore more liable to famines each of which will be more expensive to obviate than the last. There does not seem to be any escape from this conclusion;

whether it has been fully realized by the British Public or that section of it which governs India, is not quite so certain.

The consideration of this disturbing agency leads to the second of the two charges which have been brought against the principle of State relief, *viz.*, that success would be even more disastrous than failure. And it is on this ground, the ground of principle rather than of consequences, that the case against Government interference in this matter seems to us to be strongest. Probable results, indeed, may often be fairly regarded as a test of truth, and are made so far more often than they are really entitled to be. But we hold with Mazzini, that "utility is a consequence to be foreseen, not a principle to be invoked;" and if the system against which we are arguing could be shown to be based on ascertained sociological laws, we should be the last to deprecate the conduct of a party which fearlessly acted on its belief in spite of appearances however threatening. But, on the contrary, the measures proposed appear to us to set at defiance the most fundamental laws on which human welfare has been shown by experience to rest, and, indeed, to be nothing less than negation of political economy erected into a system.

That is an exceedingly narrow and consequently mistaken conception of political economy which regards it as merely the theory of *laissez-faire*. That this conception of it should be so common as it is, is probably due to the fact that the science—(if our Positivist friends will allow us to call it so)—came into contact when it first arose with sundry restrictive and cumbrous regulations, such as the mercantile system, protection of native industry, and others, over which it has now happily triumphed by opposing to them the principles of free trade, an important branch of the still wider law of the "freedom of each, limited only by the equal freedom of all." Political economy has positive resources as well as negative; though it is doubtless true that the most important services which it has hitherto performed, have been wrought by showing the injurious results of many kinds of State interference. The attacks of Comte and his followers, though the results, we venture to think of an imperfect comprehension of the subject, have yet contributed much towards establishing economical theory on a sound footing, by drawing attention to the radical distinction between those miscalled laws which have no other basis than positive morality and existing social arrangements, and those real laws of nature which are beyond the control of human will. The absence of a clear perception of this distinction, a confusion of the transient and arbitrary with the permanent and unalterable, is the source of much of the distrust with which most people regard an appeal to political economy for the decision of any question in which their feelings

and sympathies are warmly engaged. Similar is the effect—though on a much smaller land at present less influential class, of a reaction against the doctrine of evolution of which, as Mr. John Morley, with the somewhat bitter emphasis of his school, remarks that “our generation is so enamoured, as the key-word to universal development, as to believe that the true philosophy is to wait in the patience of a sublime contemplation until all abuses have evolved themselves out of the way.” The truth seems to be that evolution never encroaches on the legitimate sphere of human effort, but that all attempts on the part of human effort to interfere with evolution must be disastrous failures.

Now, if the portion of economical doctrine with which a system of State relief is in conflict, were a mere outwork or superstructure of the science—if the question at issue were one of currency or customs, or of direct or indirect taxation—one would feel extreme diffidence in resisting on grounds of economic theory alone, a consensus of sympathetic feeling so widely spread and containing so much that is worthy of esteem as that which is at the bottom of the scheme against which we are contending. But it is not so. State relief of famine is based on the negation of the most fundamental and important portion of political economy, that portion, *viz.*, which deals with the question of population and subsistence. If there is a proposition which may be justifiably regarded as proved beyond dispute, which may, indeed, as by Comte and his disciples, be passionately denied, but which has never—and so long as laws of mind and matter remain unchanged—can never be disproved, it is surely this—that the material, and consequently the moral and intellectual welfare of any agricultural community, of which the population is economically redundant, depends upon the extent to which population relatively to subsistence can be kept down—is, in short, a function of two variables, consumption and production. To quote from a recent paper in this *Review*,—“Population and subsistence are always running an endless race, and the material well-being of any society depends, *ceteris paribus*, upon the extent to which it can succeed in handicapping population. It is, of course, a physical impossibility for population actually to *outrun* subsistence; but it may press on it so closely as to leave no margin upon which men may pause a breathing space, no interval of rest which they can devote to any higher aim than the provision for merely physical needs.” In one way or another, the proportion between the number of mouths to be filled and the quantity of food available to fill them has to be maintained, if not by the moral forces of prudence and self-restraint, then by the physical forces of death and disease. The less the effectiveness of the former class of agencies, the

greater must be the effectiveness of the latter, and the material well-being of any society depends mainly upon the extent to which the moral check can render the action of the physical check unnecessary. Recognition of and obedience to this law is, perhaps, the hardest lesson which mankind have to learn. It has been very imperfectly mastered even in Europe, and can hardly be said to have been as yet comprehended at all by any Asiatic community. But it is a lesson which has to be learnt sooner or later as the indispensable preliminary, in any old country, to all permanent economical progress; and the fact that the people of India have not yet begun to learn it is surely no valid reason for removing the one influence which can force it upon them. Uninstructed minds need a definite, palpable stimulus to induce them to adopt an unwonted or unpalatable course of conduct, and it is not too much to say that if the fear of death by starvation be once removed, by far the most considerable motive for economic foresight and restraint on multiplication will be removed with it. The notion of the Government of India stepping in as a *Deus ex machina* to take upon itself the burthen of providing food for this immense population in times of dearth is, indeed, sufficiently saved from absurdity by a certain grandeur of conception; but it is none the less a notion irreconcilable with the ultimate constitution of things; it is at war with nature, and must be worsted.

The action of the English Government in dealing with the great Irish Famine of 1846-1847 may, perhaps, be quoted as a precedent of the amount of relief which may successfully be administered by State agency. But the treatment of the Irish Famine was not really a precedent at all for the course which seems to have been resolved upon in India. It was an isolated and unique event which has never re-occurred, is not likely to re-occur, and the re-occurrence of which was never contemplated at the time. The conduct of the English Government and people was prompted by no deliberate policy, but by a sudden outburst of compassion and remorse for the wrongs which had been systematically inflicted on the people of Ireland. Lastly, the effects of English liberality were so far modified as to be altogether obscured by the extensive emigration which followed. No trustworthy argument in support of what it is now proposed to do in India can be drawn from what was then done in Ireland, apart altogether from the enormously vaster dimensions and more difficult conditions of the Indian problem.

It may be contended with some plausibility that the pernicious system of land tenure which prevails in Bengal Proper and is upheld by our rule, gives the peasantry a moral claim to State support which they would not otherwise possess. It is, probably, true that the Bengal land system is one of the worst in the world; but those who support a system of State relief of famine on this

ground, are really advocating the commission of a new mistake to prop up an old one. Granting the land system of Bengal to be utterly bad, the natural conclusion would seem to be that it should be amended, not that a fresh departure from fundamental principles should be committed, to prevent an already existing error from collapsing. This would, indeed, be to daub a tottering wall with untempered mortar. Wrong doing can only be healed by right doing, not by further wrong. The ruinous consequences of departure from nature's rule can only, if at all, be averted by retracing our steps till we are once more in harmony with it; never by a further breach of it.

Another ground on which it may, perhaps, be maintained, to be the duty of the Indian Government to feed its hungry poor, also rests on the peculiar nature of Indian land tenure. So far the argument derived from it resembles that with which we have just dealt, but the two arguments are mutually incompatible not to say destructive. The former class of reasoners maintain that as we have deprived the peasant of his land, and given it away to landlords, we are bound to assist him in his time of need. The latter, on the contrary, argue that as the joint partners of the landholders in the land, we are under an obligation to support them and those dependent on them, when they are unable to support themselves. The facts involved in both arguments are no doubt locally true. The former applies mainly to Lower Bengal; the latter to the North-West Provinces, the Panjáb and Oudh. But neither ground seems to us to support the conclusion which it is attempted to derive from it. The remedy proposed for the defects of the land tenure of Bengal, could be at best but a temporary palliation which would ultimately aggravate the evil. And the obligation, which is alleged to arise as an incident of our position as joint owners of the soil, does not really arise at all. No peculiarities of land tenure can alter the duty of the State on this vital point. If, as is now becoming a recognized axiom of political philosophy, the best possible mode of securing an income sufficient for purposes of Government is that the rent of land should belong to the State, India certainly approximates more nearly to this ideal than any European country. It will, probably, be admitted that in no ideal State would it be the task of Government—whose functions would by the hypothesis be reduced to a minimum—to feed the people. But it is difficult to see why the fact that India approximates more nearly than other countries to the notion of an ideal State in the former respect, should necessitate or unjustify a departure from that ideal in the latter.

The whole question must be looked at from some wider point of view than that of merely relieving immediate suffering and our own feelings of compassion. If it could be foreseen that the end

of the world was to come next year, or even ten or twenty years hence, not a word could be said against the effort, however costly, to make the hungry and needy as comfortable as possible for the short space of life which would remain to them and their progeny. Our credit, if employed without stint, would probably suffice to procure the wherewithal to maintain in comparative luxury the existing population and any addition which could possibly be made to it during so brief a period; and as for the qualities of foresight, economy, and self-restraint, which would inevitably disappear, why, they have no ethical or practical value apart from the external conditions which render their exercise necessary, and if the conditions should cease to exist, we might very well dispense with the qualities also. As, however, there is no present reason of which we are aware for supposing that the course of the world under the conditions of which we have experience is likely to come to an end at any assignable period, and as the predictions of Dr. Cumming and his *confrères*, whatever their other merits, are incapable of satisfactory verification, it does seem as if the line of conduct which would on that hypothesis be simply common sense—is, on any other supposition, simply uncommon folly. Such may be, and in many cases doubtless is, the counsel of sincere lovers of the human race; but one does, at times, feel tempted to say with Terence—*amentium haud amantium*.

For what is the inevitable result of the operations only just now concluded in Bengal and Behar? A considerable number of lives have, probably, been saved, and a great deal of physical suffering certainly averted. That is in itself an undeniable gain. But at what cost, apart altogether from the money expended, has this gain been secured? Has it not been impressed in the strongest possible manner upon the mind of every peasant throughout Bengal that there is no necessity for him to lay by for a day of scarcity or to limit the numbers of his family, for if a famine should come again it will be converted by Government into an artificial plenty, so that he who has saved and he who has not saved will be on the same footing? Or if it be said that the ideas of laying by for a day of scarcity or of limiting the numbers of his family have never entered the mind of a Bengal peasant, it cannot, at least, be denied that we have done all that in us lay to prevent the possibility of their so entering. An opponent may, perhaps, rejoin that "as men have been such are men," and that the notion of an Indian ryot or day labourer ever acquiring the faculties of prudence and self-restraint is—if not too absurd to be discussed—at least too far remote to be worthy of practical consideration. To which it seems a sufficient answer to say that if the Indian ryot is ever to ascend in the scale of being, it will not be until centuries hence, perhaps, he has made some advance in those

same faculties, and that the tendency of our action has distinctly been to retard the date of his doing so. If the strongest possible stimulus to foresight, the dread of death by starvation, has hitherto failed to produce the quality desired, no weaker inducement is likely to prevail.

Let us just consider for a moment a concrete case. Suppose a couple of ryots living in the same village. Láchár Baksh has a wife and ten small children, and the joint property of the family consists of a hovel, while its individual members have nothing they can call their own save a rag and a *lotah* apiece. His neighbour, Chaturdin, is also a poor man, but his family consists of only a wife and two children, and he has a little store of money and grain sufficient to carry him through a period of scarcity, not without pinching, indeed, but without fear of starvation. The famine comes. Government steps in, and provides food and employment for Láchár Baksh and his family, down to the two-year old child, which earns its livelihood by making mud pies on the side of the road where its father does a moderate day's work, instead of amusing itself in the same way in front of the paternal hovel. Now, what more can the Government do for Chaturdin? Nay, it cannot do so much, for he has only four mouths to be filled, while Láchár Baksh has twelve. Supposing him to be extremely public-spirited, he stays at home, and supports himself and his family on his savings, and by the end of the famine, he and Láchár Baksh are, probably, much on the same level. If his public spirit is not extreme, he goes to the relief-works, too, and imposes an unnecessary burthen on the State resources. Can it be denied that the action of the Government has weakened the springs of carefulness and foresight by eliminating the strongest existing motive to economy.

But is the State, then, it may be asked, to leave the people to starve? Is it to fold its hands and do nothing? The answer must be an emphatic negative. There is plenty to be done, but this is not the way to do it. To improve communication, to promote irrigation, to encourage private trade, and above all to spread far and wide really sound and practical, not merely vocabular education—is not this a sufficiently ample field for the energies of the most ardent and insatiable reformer? And if there be any truth in what has been said above, these modes of activity have one not inconsiderable advantage over that which we have ventured to deprecate, and it is this, that they are in harmony with natural law, that they do follow the lines of the constitution of things instead of transecting them at right angles. They possess, while the other lacks, the cardinal quality by the presence or absence of which any scheme of social reform may be approved or condemned—they do not help the depressed and ignorant, but they enable them to help themselves.

And yet all these, important as they are, are not the most important. There is one condition still more essential than any of these to the growth of industry and foresight, a condition which it is far too much the fashion among us to assume has been already attained. And that condition is simply this, that to each man be secured with the utmost attainable certainty the fruits of his own labour. In no agricultural community where the land is tilled mainly by small cultivators, can this be attained without fixity of tenure. This is, indeed, a service which it is beyond dispute in the power of the Indian Government to perform. But it has not been performed while, as in Oudh, hundreds of thousands of cultivators are always liable to ejection for no better cause than the *sic volo sic jubeo* of their talukdar. Whether or no the power is very frequently exerted, may, perhaps, be a disputed question; but the power is always there. The Oudh peasant who has no recorded rights, has no twelve years' rule to fall back upon. His tenure depends altogether upon the will of the proprietor of the soil which he happens to cultivate, and if it is the profit or the caprice of that proprietor to eject him, ejected he must be. It does not need much reflection to perceive the reality of the hindrance which this obstacle must oppose to habits of continuous industry and exertion. The natural hindrances in a country great part of whose harvests are dependent upon an uncertain rainfall, are sufficiently serious to relieve us from all necessity of creating artificial ones. Would it not be well to devote more attention to the duty which lies nearest to our hands—a duty which it is beyond question incumbent upon every State to discharge—rather than expend our energies in the attempt to secure an over-crowded population against famine by the doubtful, not to say desperate, expedients of increasing their numbers and diminishing their self-reliance? The necessity—real or apparent—for abnormal efforts such as these is nearly always the result of a long course of previous neglect of the commonplace, every day duties, steady performance of which would have rendered the application of more heroic remedies superfluous. In proportion as life conforms more nearly to rational principles does the sphere of casual acts of benevolence or good nature contract. *Si nous voulions être toujours sages, rarement aurions nous besoin d'être vertueux.*

One more probable objection which may be noticed is the obvious one that a condemnation of State relief to the needy includes a condemnation of private benevolence; that if it is wrong for Government to spend taxes raised mainly from the poor in feeding the poor, it is likewise wrong for A, B or C to give a hungry man a meal. Here, again, the answer must simply be that the conclusion does not follow. Private benevolence is free from the three

cardinal defects which vitiate State bounty. For, firstly, the charitable individual spends that which is his own, and not that which he has received in trust for others. Secondly, his action is an exercise of sympathy, the faculty which, as has been well remarked, is the most essential of all to social growth ; while State bounty, on the other hand, directly tends to deaden sympathetic feeling by apparently rendering it superfluous. Thirdly, the certainty of obtaining private charity can never be sufficiently great to paralyse the springs of exertion and foresight.

To resume as briefly as possible the substance of what has been said :—The ideal State would be that in which Government was unknown, because unneeded ; and the presumption is always in favour of *laissez-faire*. The extent to which *laissez-faire* is practicable, depends mainly on two things—the strength of the spontaneously progressive element among the people, and the degree of homogeneity which prevails between the people and their Government. Hence it follows that India, in which the tendency to spontaneous progress is very weak, and in which the civilisation of the Government is very far in advance of that of the people, presents in a higher degree, perhaps, than any other country, the conditions which alone can justify departure from the principle of non-interference. But this departure from the general law, being in itself an evil, is only defensible so far as its tendency may be to render such departure ultimately unnecessary, *i.e.*, so far as it tends to promote energy and intelligence. If there be any truth in this, all attempts to mitigate the working of those economic laws which are beyond the permanent control of human efforts, must be emphatically condemned. To quote once more from Mr. Herbert Spencer :—

“ To become fit for the social state, man has not only to lose his savageness, but he has to acquire the capacities needful for civilized life. Power of application must be developed ; such modification of the intellect as shall qualify it for its new tasks must take place ; and, above all, there must be gained the ability to sacrifice a small immediate gratification for a future great one. The state of transition will, of course, be an unhappy state . . . Humanity is being pressed against the inexorable necessities of its new position—is being moulded into harmony with them, and has to bear the resulting unhappiness as best it can. The process *must* be undergone, and the sufferings *must* be endured. No power on earth, no cunningly-devised laws of statesmen, no world rectifying schemes of the humane, no communist panaceas, no reforms that men ever did broach or ever will broach, can diminish them one jot. Intensified they may be, and are ; and in preventing their intensification, the philanthropic will find ample scope for exertion. But there is bound up with the change a *normal*

amount of suffering, which cannot be lessened without altering the very laws of life . . . All that a poor law, or any kindred institution can do, is to partially suspend the transition—to take off for a while, from certain members of society, the painful pressure which is effecting their transformation. At best this is merely to postpone what must ultimately be borne. But it is more than this ; it is to undo what has already been done. For the circumstances to which adaptation is taking place cannot be superseded without causing a retrogression—a partial loss of the adaptation previously effected ; and as the whole process must some time or other be passed through, the lost ground must be gone over again, and the attendant pain borne afresh.”

Much more might be said, and many other objections, though not, the writer believes, unanswerable ones, might be raised. But he hopes that what has been already advanced may suffice to draw attention to what seems to him a tremendous mistake. Dissent from all but universal opinion, always sufficiently painful, is especially so when that opinion contains much with which it is impossible not to sympathise. “Callous,” “hard-hearted,” and “*doctrinaire*” are, probably, the mildest epithets which will be applied to the main doctrine which it has been attempted to set forth in this paper—the doctrine, *viz.*, that no Government on earth, least of all the Government of an over-crowded country like India, can undertake, without the most ruinous consequences, to feed a population over the increase of which it has no control whatever. That this doctrine, however, rests on laws of matter which are permanently, and on laws of mind which are temporarily at least, unmodifiable, the writer firmly believes. That these laws embody perfect justice and mercy, he is not called upon to maintain. But of the wisdom of obeying them, if they be, indeed, laws of nature, and ultimately or for the present uncontrollable by human efforts, there can be no dispute. The working of Nature often seems irreconcilable with our notions of moral fitness ; and a special pleader of pessimist tendencies, like Schopenhauer, can doubtless make out a plausible case for the hypothesis that the Universe is a scheme for the equal distribution of misery, tempered only by the ingenuity of the victims. But sooner or later, her commands have to be followed. She does not require us to praise her, though she may deserve our praise, or to attribute to her any unreal ethical perfection. What she does demand is obedience, and that quickly. The conditions of life are sometimes so complex and involved that there may seem to be no simple, no really moral road out of them at all—only a certain compromise which shall surpass in morality the compromise next beneath it. Whether this be indeed so or not has been a vexed question for all time, to which every age, and in his

own small way, every man, must find an answer. The nature of that answer must always, in the main, depend on temperament, and even on transient moods. The same mind which under one set of impressions, might ask with Owen Meredith's Clytemnestra,

"What need

Of argument to justify an act
Necessity compels and must absolve?
For that which must be, being what it must,
Is neither well nor ill; nor is there good,
Or evil in unmindful circumstance"

might, under other, and let us hope, truer impulses, enter into the spirit of Marcus Aurelius when he wrote:—

"But if this is so, be assured that if it ought to have been otherwise, the gods would have done it. For if it were just it would also be possible; and if it were according to nature, nature would have had it so. But because it is not so, if, in fact, it is not so, be thou convinced that it ought not to have been so."

H. C. IRWIN.

ART. II.—THE INTERNATIONAL CONGRESS OF ORIENTALISTS, LONDON, 1874.

CONGRESSES are the fashion of the day. Birds of every feather flock together, and though apt to peck at each other at a distance, it must be admitted that personal meetings bring with them a smoothing down of asperities, and a softening of animosities. Among the Congresses of the year has been that of the Oriental savans of the world: it was the second of the series, as the first was held at Paris in 1873, and the Congress for the year 1875 will be held at St. Petersburg. The meeting at London, as regards both its immediate and its ulterior object, was most successful, and though its proceedings were fully chronicled in the ephemeral journal, and an official report will, in due course, appear, still it seems advisable that some notice of an event of no ordinary importance should be made in a periodical such as the *Calcutta Review*, for the convenience of future reference, and as affording opportunity to take stock, as it were, of the accumulated wealth of Oriental Research, and to mark the high tide level of eastern knowledge.

The attendance at London was more numerous than can, probably, be anticipated at any future Congress, for London is easy of access, cosmopolitan in habit, and has outgrown all those national prejudices and hatreds which now sadly alienate the great Teutonic and Gallic races from each other. Moreover, there is in England, what exists nowhere else, an intelligent public, capable of appreciating the labours of Oriental students, without being engaged either in authorship, or in professional duties. In Paris and Germany, learned Society consists of professors and authors only, who speak and write for each other, and as the orbit of each is limited, a deferential and respectful silence is maintained by the Sanskritist to the Sinologist, and by both to the Assyriologist. In England it is otherwise: there is a limited—yet an appreciable—number of men, who enter into the labours of their more laborious brethren. Some, indeed, strive to maintain a certain amount of intelligent knowledge all down the line: others confine themselves to special subjects: thus it came to pass that the benches of the Congress were crowded with men quite capable of appreciating a discovery, or detecting a palpable fallacy disguised under a plausible theory. Men whom the authors of books, or the writers in the journals of the learned Societies, had never heard of, were nevertheless quite abreast with the subject, ready to applaud, condemn, doubt, or reserve for consideration each of the statements brought under notice.

It must be briefly noted, that the week, during which the Congress was sitting, began on the 14th and ended on the 20th of September: inconvenient it may have been for tourists and sportsmen, still it was the only one, during which the attendance of the foreign professors could be secured. The meetings were held in the theatre of the Royal Institution, Albemarle Street, that of King's College, Strand, and the rooms of the Society of Biblical Archæology in Conduit Street. Interspersed betwixt the meetings were visits to museums and libraries, and social gatherings; and the central office of general reference was located in the rooms of the Royal Asiatic Society. Considering that the one sentiment more bitter than *odium theologicum* is that of *odium literarium*, and that every author of a book on Oriental subjects deems it part of his duty in the preface to insult and stultify any preceding writer on the same subject, and is incapable of seeing that on many matters we are all still groping in the dark; considering that arrivals were uncertain to the last moment, and that there was a lamentable want of organizing power in the council of direction: still happily we repeat, that the Congress was a great success, that men saw each other in the flesh for the first time, who had known each other in print for a quarter of a century: that hands were joined in amity, which had wielded broad-swords: that ideas were interchanged, and publicity given to discoveries—that correspondences were commenced which may last many a year, refreshed, no doubt, by annual meetings at future Congresses—and that all parted with a sense of pleasure and satisfaction, having left their photographs in London.

Before we detail further the proceedings, we must consider the great kingdoms, into which the world of Oriental knowledge is now divided, and the great nationalities which have supplied scholars to go in and possess these kingdoms. If we use hard and new phrases, it is not from motives of pedantry, but in order to take a large view of this great subject. The grand division may be thus defined.

Egyptologists.
Assyriologists.
Sinologists.

Semites.
Sanskritists.
Turanians.

All these are linguists proper, but in connection with them is a great army of numismatists, palæographers, archæologists, ethnologists, epigraphists, and lastly the shrewd and skilful diviner or guesser, who, without any deep critical knowledge, has the divine gift of catching at the meaning of mutilated inscriptions or defaced coins by a species of inspiration. It will be perceived that from the domain of an Orientalist Congress, Europe and America are rigidly excluded, and the whole of Asia and North Africa as far as the pillars of Hercules are included.

At the Congress there were six sections, and we transfer to our pages the official prospectus :—

1. Aryan Section—President, Professor Max Müller.
 2. Semitic Section—President, Sir Henry Rawlinson, K.C.B.
 3. Turanian Section—President, Sir Walter Elliot, K.C.S.I.
 4. Hamitic Section—President, Dr. Birch, LL.D.
 5. Archæological Section—President, M. E. Grant Duff, Esq., M.P.
 6. Ethnological Section—President, Professor R. Owen, C.B.
- Dr. Birch will act as President of the Congress.

The countries which furnished representatives were Great Britain, France, Germany, Hungary, Sweden, Russia, and India. No delegates came from the United States or the Iberian Peninsula, and Italy was also found wanting; nor do we find the names of any Dutch, or Belgian, or Danish scholars. Turkey and Greece were silent, but Egypt was ably represented by a most accomplished scholar. It was understood that the German Governments so thoroughly entered into the advantage of such meetings, that they provided their representatives with the means of attending.

We may be able in some future number to give information with regard to living Oriental scholars, as it is interesting to know something about the men, who, scattered all over Europe, have their thoughts and eyes fixed on the East, though some of them have rarely left their native province: for the present we can only read the names of the most distinguished who arrived from each country.

Great Britain sent the following :—Sir H. Rawlinson, Dr. Birch, Mr. Fox Talbot, Rev. J. H. Sayce, Dr. Cull, Mr. Edward Thomas, Mr. Fergusson, Dr. Muir, Dr. Caldwell, Mr. Vaux, M. LePage Renouf, Sir Walter Elliot, Professor Wright, Professor Cowell.

France sent a very scanty number: and many of the great scholars at Paris were, perhaps, more thought of on account of their absence, than they would have been, if they had been present. The idea of these Congresses had originated at Paris, which is, indeed, the metropolis of Oriental learning; and M. Leon de Rosny, the President of the first Congress, took an active part in the second, and with him were M. Emile Burnouf, Professor Jules Oppert, Baron Texier de Ravisi.

Germany sent some of her best men :—Professors Brockhaus, Dillmann, Gosche, Haug (late of Bombay), Krehl, Lepsius, Merse, Noldeke, Pertsch, Roth, Schrader, Spiegel, Stengler, Trumpp, Weber, Ebers, Windisch, and Weil.

The Italian Government had deputed their most distinguished scholar, Professor Ascoli of Milan, to attend the Congress; but he was prevented by some reasons not stated. He sent the best wishes of the savans of his country, and expressed their readiness,

and that of their Government, to welcome the Congress, if the choice for the next session should fall upon Italy.

The Indian Government expressed their readiness to facilitate the attendance of some of the most distinguished native scholars of India; but there are, as is well-known, great difficulties in the way of the class, who naturally supply the soundest scholars in that country. One native member of the Civil Service did attend; but here, again, the presence of some was wished for in vain. The representative of India was named Shunkur Pandurang Pandit, who, by his proficiency and works, was in every way entitled to take his place among Oriental scholars.

It must be mentioned that there were two sets of delegates. One comprised the representatives of the Congress in each country, who had assisted in the organisation and correspondence, these were called the foreign delegates: the other set comprised those who were sent at the charge of foreign Governments to represent their country at the Congress. Professor Lepsius was both a foreign delegate and also personally delegated by the Imperial German Government.

The Congress assembled on the day appointed, Monday, September 14th, and it at once appeared how successful it was both in the quantity and quality of the attendance. We shall now proceed to notice what happened on each day, quoting freely from the inaugural addresses and the papers read, and discussions held as far as the latter have been recorded.

On the evening of Monday the Theatre of the Royal Institution, in Albemarle Street, was crowded to listen to the inaugural address of the President, Dr. Samuel Birch, Keeper of the Oriental Antiquities of the British Museum, who was so far qualified that, though his personal predilections were decidedly to the Hamitic Section, yet by the necessity of his office, he had a certain knowledge of, and interest in, the whole subject; while the failing of most Oriental scholars is to devote themselves to one particular branch, and actually ignore all the rest. This may, perhaps, be a necessity of their calling; for it may truly be said *ars longa vita brevis*. Eminence in any branch of the subject can only be obtained by long and exclusive devotion. It was not so fifty years ago.

After a few introductory remarks the President made the following piquant observations, which we quote in full:—

“The advance of civilisation, &c., is marked by the increased attention paid to the pursuit in which we are engaged. The spread of knowledge has not only rendered that popular which was at one time reserved for a narrow circle, but has elevated these studies in public estimation. In this country the bond which holds us to our Asiatic Empire, the links that connect our commerce with all the nations of the East, have rendered the intimate acquaintance with the languages, thoughts, history and monuments of these nations

not a luxury, but a necessity. Probably, persons could be found in so large a city, if required, who could speak any dialect under the sun or read any writing upon the planet. To whatever branch of Oriental learning any of those who have honoured the Congress with their presence to-day is attached, he will be sure to find some congenial mind to take a warm interest in his pursuits, interchange thoughts with him, or aid in the solution of his difficulties: nay, the pursuit of these studies is a kind of touch of nature—it makes us all akin, just as in the study itself everything that is individual disappears from the mind, except the pursuit itself. Orientalists, too, are all, so to say, men born of the same family, and, like a family, mutually interested in the success of their respective studies. Before that, as students, all the distinctions of race, creed, and nationality disappear or are forgotten. Even criticism ought neither to be nor become personal, inasmuch as science places for its object the highest scope of the mind truth which is in most cases difficult to find, and no reproach to miss. The nineteenth century has seen the revival of Oriental learning; and the great discoveries made throughout the East, in Mesopotamia, Egypt, India, and Persia, have thrown an entirely new light on the ancient monarchies, religions, and languages of the Eastern world as it existed 40 centuries ago. This has been due to several causes, chiefly to the improved facilities of access, by which travellers and others have visited these countries and their monuments, and have excavated their remains; and partly to the advance made in Europe itself, which has enabled the monuments discovered to be more accurately copied. The extensive excavations made throughout the East, and the continuous explorations of modern travellers, have left no accessible monument uncopied; and the quantity of the material now placed at the disposal of the student is consequently immense. With the increased number of texts of the old East, has come the more accurate knowledge, based on the power of comparison now given to the student. These materials were unknown to inquirers of the previous century. Empires have been exhumed, and for the first time a contemporary history of recorded events has been found.

It is scarcely possible to over-estimate the value of the inscriptions on rocks and stones and pottery, which are now brought under the notice of scholars from all quarters; and one of the subjects, which the President suggested to the Congress, was to recommend, and bring that recommendation to the notice of the different Governments "that facilities should be accorded in the "East to excavations undertaken purely from a scientific point "of view; for these branches of excavations, which follow up the "hints afforded by monumental information, require continually "the discovery of fresh materials to stimulate the student, and "without them the study languishes." The subject is far too large to notice further: we may hope to treat of it separately at some future time. Egypt alone has had the good fortune among the elder nations of preserving ancient records on fragile materials such as papyrus. The Assyrian, Phœnicians, Cypriote, Punic, Himyaritic, Moabite, Berber, inscriptions are uniformly on stone; and those, too, found in a fragmentary and injured state.

The President then proceeded to throw out some important suggestions on the subject of an accepted system of Transliteration, a Universal Alphabet, and, still more striking novelty, of

writing by cyphers, called Pasigraphy. To give publicity to these advanced views on a most important subject, and to obviate the possibility of errors on our part in reporting his meaning, we transcribe Dr. Birch's actual words—and they open out a very large, and to some an entirely new subject of consideration, which the next generation will dispose of in a very summary manner. It may be added that pasigraphical dictionaries, in the English, German, and French languages were distributed to members of the Congress, who could thus communicate with each other without any knowledge of the language spoken by either party.

I turn to another point for attention, and that is the transliteration of Oriental texts into European characters. Great progress in this direction has been made of late years, and many schemes have been proposed. In some instances, the learned societies and scientific journals have insisted on the adoption of particular systems for papers admitted into their pages. There are many members present of all the Oriental societies and academies of Europe, and it will be for them to consider if some mutual agreement can be arrived at on this subject, and, for most Oriental languages, a decision favourable to one universal transliteration would be of the highest importance, as it would in many instances supersede the necessity of printing in various characters and different Oriental types, an expensive and difficult process. It would not, indeed, effect this for languages written with syllabic characters, but for those only which have an alphabetic one; and the same mode of transliteration would be an invaluable aid to the simplification and rendering of words in these languages, and making them universally intelligible. This subject will be, no doubt, submitted to the consideration of one of the sections of the Congress. It is, indeed, one of the subjects which it should be the especial object of the Congress to regulate, or at all events to initiate. That some such necessity exists and is felt is proved by the constant changes made by individuals in their transliteration of the vowels of Oriental tongues, whether living or extinct; the older systems already adopted not answering to their special notions of the manner in which these languages should be transliterated. Should the Congress be able to pronounce any opinion on this difficult subject, that opinion would, no doubt, carry with it great weight, even should it not finally decide the question, and lead to a further consideration of this pressing want of philological unity. It is not, perhaps, necessary for the Congress to consider how far it would be desirable to discuss the question of an universal alphabet—such a one as would supersede for Orientals themselves the necessity of writing in their own different characters the different languages distributed over the East. Could such be devised, it would be a great advantage for the acquisition of those languages by the West, months and perhaps years being now spent in mastering alphabets and syllabaries of complete kinds. Among the Polynesian islanders the European script has been successfully introduced and adopted, because they never had, till the appearance of European civilisation among them, a mode of writing; and there was consequently no national *amour-propre* to contend with, nor any script already in use to supersede. It is not so in the East, attached, from various causes, to their respective characters. But it is evident that, clothed in a European alphabet, there would be no greater difficulty in mastering many of the Aryan and Semitic languages by the Western scholars than in acquiring the different languages spoken in Europe—a task much facilitated by their having one common mode of printing and writing the same sounds. It may be considered the first step to writing

among the European nations, this adoption of a common alphabet, when entirely carried out; and nothing would more powerfully connect the East and the West than the removal of these barriers which prevent an easy acquisition of those keys of thought necessary for the mutual understanding and happiness of mankind. It is a natural transition to pass from this subject to the consideration of the attempts making to introduce universal communication by means of Pasigraphy, or writing by ciphers. This system has been for some time in use in the West, and different ways have been proposed to arrive at the result. One is the mode of communicating by signals, consisting of numbers, at sea. Certain sentences of general use are numbered and translated into the different European languages. The flag which carries the number speaks the same sentence, when hoisted, to vessels of all other nationalities; in fact, the number is an universal medium of maritime communication. A flag with a few numbers asks a question; another with fewer or more gives the answer. Now, this device contains the elements of an universal language, limited, indeed, to a few stereotyped sentences such as are generally wanted in maritime intercourse. A modification of this system has been adopted for the purposes of commerce, for the Transatlantic and other telegraphs, to supersede the necessity of long and continuous messages, which would take too much time and trouble in transmission. But the works compiled for this purpose are in the English language only. A modification of this principle will be laid before the Ethnographical Section, consisting principally in the substitution of numbers for words, the same number answering to the same equivalent word in all languages. It is evident that when dictionaries on this principle shall have been compiled it will be possible for a limited communication to be held in writing with Orientals, of whose language the European is ignorant, in the same manner as by maritime signals. It is a step towards universal language; and, although a feeble one, probably the only step which will ever be made. Its value and defects will, no doubt, occupy the attention of the Ethnographical Section. It is not a language properly so-called, but a means of interchange of thought, and might prove of the greatest value where other means were not at hand. These divided by sounds will be united by numbers.

The President then entered more particularly into the organisation of the sections of the present Congress, remarking that the President of each section would make his inaugural address. Touching lightly, therefore, on the subjects of each section, in the presence of the assembled wisdom of the Oriental world, he made the following emphatic declaration in favour of the reality and truth of cuneiform studies and discoveries, and, if no other advantage were to be derived from such Congresses, there would, at least, be this one, that the mouths of all scoffers and doubters, on this subject are henceforth and for ever stopped. The path of the cuneiform student is no longer obstructed: year by year he will advance further into clearer day, opening out consequences to the study of Comparative Mythology, generally, and Comparative Grammar of the Semitic languages, the importance of which cannot as yet be appreciated.

"Since the evolution of the name of Darius, the study has advanced in an unprecedented manner, no fewer than five languages—*viz.*, Persian, Median, Babylonian, and two sorts of Assyrian—having been deciphered and inter-

preted, and the history of these Oriental Empires having been examined from their original documents and contemporary sources, thus relieving us from the necessity of relying upon secondary information afforded by Greek and other authors. The discovery of the Persian by Grotefend, subsequently perfected by the labours of Lassen, Burnouf, and Rawlinson, was succeeded by that of the Babylonians and Assyrians by Hincks and Rawlinson; and it is precisely these last two languages which have produced a golden harvest of results, when completed by the labours of Professor Oppert, Mr. G. Smith, and Mr. Fox Talbot. A light entirely new has been thrown on the mythology and history of these old Semitic nations. The fact of another language called the Accadian or Sumerian, extinct like the Assyrian, but not easily referable to a particular stem, although supposed to be of the Turanian stock, is an unexpected addition to the knowledge of the languages of Western Asia. It is not to be supposed that discoveries so startling have been received without incredulity or opposition. The nature of these languages, written in a complex syllabary which only finds its parallel in the abnormal script of Japan and the difficulties which first attached to the decipherment of the names of gods and kings caused the first attempts to be coldly received by scholars especially devoted to Semitic studies. These doubts have, however, since given way to convictions, and the truth of Assyrian researches has been finally recognized. The study of these ancient languages, which may be classed as extinct in contradistinction to those which, though no longer spoken, have yet had their knowledge preserved by tradition, and which are called the dead, is strictly inductive. The examination of the logical deductions to be made from the position of a word in different passages is found to be as important, if not more so, in determining their meaning as their comparison with words in existing or dead languages supposed to be cognate. The consideration of some of these points will occupy the attention of the Semitic section, as well as the nature of the grammar and structure of the Sumerian, the Elamite, and the Median.

The same observation also applies to the researches into Comparative Mythology and the evolution of ancient religions; for it is only by the consideration of the Semitic myths that a true appreciation can be made of the extent to which Western Europe was influenced by the traditional legends of Babylonia and Assyria.

The historical inquiries have resulted in a still greater conflict of opinion, and M. Oppert will bring these divergences before the section; for it cannot be concealed that the chronology of the Jews and the Assyrians, as they at present stand, does not harmonise—there is a want of synchronism. It is not possible to decide at present where the error lies, but nothing but an act of violence, such as the alteration of text, or the forced hypothesis of an omission of years in the Assyrian canons can at present reduce them to a common level. The difficulty has many bearings, and affects history generally; and could these differences be reconciled, that alone would entitle this Congress to be regarded as marking an epoch in the annals of ancient historical investigation.

After cursorily remarking that the Sanskrit was not a *monumental* language, as no monuments inscribed in Sanskrit, or its nearest Indian dialects, are older than the fourth century B.C., and that no Aryan alphabet is as yet known, which can be considered older than the seventh century B.C., a period which the Egyptologists and Assyriologists deem comparatively *recent*, the President treads on firmer ground when he arrives at his own peculiar sphere, the Hamitic section. Here, again, it is a satisfaction to quote his very

words, announcing as a fact beyond all contest that the ancient language of Egypt is in every sense the property of the present generation.

It is not necessary here to enter into a detailed exposition of the mode of decipherment and interpretation of the hieroglyphs which was aided by the trilingual inscription of Rosetta, and did not require so great an effort of the mind to discover as the cuneiform. The only difficulty was to divest the mind of the idea that figures and representations of objects were not used as pictures, but as phonetic ciphers. That point reached, the difficulties rapidly disappeared, and the inductive method pursued with a mathematical rigour by the first inquirers and by later students has evolved alike from the grammar and the dictionary the relation of the Ancient Egyptian to the Coptic. So great has been the progress made that the purport of all texts and the entire translation of most is no longer an object of insurmountable difficulty.

And then follow the piquant remarks, spoken, we must remember, in the presence of the assembled Egyptologists of the world, in which beyond those distant centuries, to which we have now got access, a more distant vista of centuries is hinted at, during which the gradual development of this wonderful alphabet must have been slowly worked out. As in language itself, so in the vehicle for representing sound by marks, when we have pushed our inquiries as far back as possible, when we *have dropped our longest line, there is still no bottom*. Admitting the extreme antiquity of any Sanskrit, Hebrew, or Egyptian word, how many previous centuries did it take to wear that word down to its present shape and meaning?

It is one of the marvels of Egypt and its early civilisation that it starts already full grown into life in the valley of the Nile as a nation highly advanced in language, painting, and sculpture, and offers the enigma as to whence it attained so high a point of development. There is no monumental nation which can compete with it for antiquity, except, perhaps, Babylonia, and evidence is yet required to determine which of the two empires is the older. As far as an opinion can be formed from archæological considerations, there is a great weight of evidence in favour of gradual development in Babylonia. Some of the linguistic tablets in terracotta found in that country have recorded the transactions in that region in characters gradually developing from the pure pictorial into the conventional cuneiform, but no Egyptian inscriptions as yet discovered, are written exclusively, or even mainly, in hieroglyphs used as pictures only in contradistinction to sounds. All, even those of the most remote antiquity, are full of phonetic hieroglyphs. The arts of Egypt exercised an all-powerful influence on the ancient world—the Phœnicians copied their types, and Greece adopted the early Oriental style of architecture, for the Doric style came from Egypt, the Ionic from Assyria, the later Corinthian came from Egypt. If Phœnicia conferred an alphabet on Greece, Egypt suggested the use of such characters to Phœnicia. Already, in the seventh century before Christ, the hieroglyphs represented a dead form of the Egyptian language, one which had ceased to be spoken, and Egyptian traders used a conventional mode of writing simpler than the older forms, and better adapted for the purposes of vernacular idiom.

The President remarked with justice that the labours of the philologist must be supplemented by the archæologist and ethnologist to secure completeness and prevent errors; and he alluded to a subject, which has, indeed, obtained a painful prominence, the wholesale forgery of antiquities for the purpose of dishonest gain, which has thrown suspicion and engendered animosity everywhere.

M. Leon de Rosny, the President of the First Congress at Paris, made some suitable remarks in French, especially this one, that these assemblies constitute a new era in the history of science; that they give a well-deserved publicity to labours otherwise not fully appreciated, and attract the sympathies of the outside world of all nationalities. With a few observations from Shunkur Pandurang Pandit, the Indian representative, the proceedings of the first day closed.

On Tuesday morning, the members of the Congress met in an informal manner in the British Museum; and, separating themselves in groups in that enormous building, were conducted by, and had the advantage of the company of Dr. Birch, the Keeper of the Oriental Antiquities, Mr. Newton of the Classical Department, Mr. P. LePage Renouf, the accomplished Egyptologist, and other of the high officials of the institution. At half-past two, the Congress attempted to assemble in the rooms of the Royal Society of Literature, St. Martin's Lane, which were calculated to hold about one-fourth of the number. Sir Henry Rawlinson, President of the Semitic section, commenced his inaugural address; but interrupted by the clamour of members crushed on the stairs, or left out in the cold of the street, was compelled to adjourn the meeting to the Theatre of the Royal Institution. When the Congress assembled there, he had to commence again, and this caused a sad loss of time, and entirely prevented any papers being read, or any discussion taking place. The eyes of the Congress were now painfully opened to the weak side of the arrangements of the Managing Committee. Were so many savants assembled in one focus merely to hear a lecture by one member however distinguished in a language unintelligible to at least half of the hearers, what will be the feeling of the English members of the Congress next year at St. Petersburg, if the proceedings are limited to long lectures in the Russian language?

The President of the section, Sir Henry Rawlinson, was worthy of the place, and his address was worthy of the man, not too long, and to the point. He showed that the chief interest on the part of the general public in the Semitic family of languages was connected with the Bible, and that that side of the subject had been unduly strained, as Hebrew was only one, and *not the*

most important and not the most ancient member of the family : he showed further, that the materials were not yet available "for sound generalisation in regard to the origin, development, and scientific classification of the Semitic languages," in the same masterly manner in which the Aryan languages had been handled during the last half century. Modestly, yet confidently, and with the air of a man who had fought a good fight, won a great victory, and left his mark on his age, he made the following remarks worthy to be quoted *in extenso* :—

All that I propose to do in opening this section is to draw attention to the very enlarged proportions that have lately been given to Semitic research. Not only have our Phœnician materials been more than doubled since Gesenius wrote his famous text-book on the relics of that language, but Southern Arabia has yielded a mass of inscriptions from copper-plates and sculptured rocks which have brought the old Himyaritic language fairly within our grasp ; and more recently Assyria has been added to the list, sustained inquiry having opened up to the investigation of scholars that ancient language, which, as far as our present knowledge extends, would seem to be one of the earliest members of the widespread Semitic family. Educated Europe was very slow to admit the genuineness of cuneiform decipherment. It was asserted at first as a well-known axiom, that it was impossible to recover lost alphabets and extinct languages without the aid of a bilingual key, such as was afforded to Egyptologists by the famous stone of Rosetta. Our efforts at interpretation were therefore pronounced to be empirical, and scholars were warned against accepting our results. I have a vivid recollection, indeed, of the scornful incredulity with which I was generally received when, in 1849, I first brought to England a copy of the Babylonian version of the Behistun inscription, and endeavoured to show that by comparing this version with the corresponding Persian text I had arrived at a partial understanding of the newly discovered records of Assyria and Babylonia. I did not assume to have done more than break the crust of the difficulty, and yet I obtained no attention. Hardly anyone in England, except Dr. Hincke and Mr. Norris and the Chevalier Bunsen, was satisfied of the soundness of the basis of inquiry. Nor, indeed, did the study make much progress for a long time afterwards. Semitic scholars like M. Renan, accustomed to the rigid forms and limited scope of alphabets of the Phœnician type, were bewildered at the laxity of cuneiform expression, where phonetic and ideographic elements were commingled ; and refused to admit the possibility of such a system of writing being applied to a Semitic language. Biblical students, again, were not favourable at first to the idea of testing the authenticity of the Hebrew annals by comparing them with the contemporary annals of a cognate people, and for a time ignored our results, while the Classicists of this country who followed the lead of the late Sir George Cornwall Lewis calmly asserted the superiority and sufficiency of Greek tradition, and treated our endeavours to set up a rival school of historical criticism, derived from a barbarian source, almost with contempt.

Sir Henry then ran over the names of the distinguished Assyriologists of the different European nations, yielding the palm to the French in the persons of MM. Jules Oppert, Menant, and Lenormaut, and to the Germans in the persons of Dr. Prœtorius, and Professor Schrader. He implied that his

own knowledge, and that of his English fellow-labourers, had been surpassed by foreign scholars, who, taking "a practical rather than sensational view of the subject," had applied "a searching and elaborate critical power, combined with intense application, and a thorough mastery of the Semitic languages, rather than conjectural translations, or premature generalizations;" he further remarked "that the illustration of obscure points of ethnology and chronology were more attractive in their nature, than dry disquisitions on grammar and etymology, but that these dry studies ought to be a necessary preliminary to the others, whose very attractiveness is in inverse ratio to their philological value." This is a wise caution: the period for guess-work is past: and, as Sir Henry Rawlinson was the first to open twenty-five years ago the sealed casket, he is entitled to give his advice *ex-cathedra* to younger scholars, how those treasures can be most advantageously used, so as to weld together the newly discovered members of the Semitic family with their three younger sisters who have lived down to our time on the secure basis of manuscripts and traditions, the Hebrew, Syrian, and Arabic:

I do most earnestly recommend scholars to pay more attention in future to the rudiments of the study than to its higher branches. It would be desirable, I think, in all future publications, to accompany the translation of every sentence with its grammatical and etymological analysis, especial care being taken to compare the corresponding roots and inflections in the cognate languages, not at random or from a fancied resemblance of sound, but according to the established rules of euphony and grammatical change. As matters stand at present, we are far from having overcome the elementary difficulties of phonetic representation. Notwithstanding, indeed, the numerous alphabets and syllabaries that have been published, there are still many cuneiform characters of doubtful power, while the vernacular names of the gods, which enter so largely into the composition of Babylonian and Assyrian proper names, and are thus essential to historical identification, are for the most part rendered conventionally and provisionally. For my own part, I should hail the determinate reading of these names, a result which in default of direct evidence can only be obtained by a very large and laborious induction as a more substantial advance in Assyriology than the discovery of a new dynasty of Kings or the complete explanation of the whole series of astronomical tables. Let me, then, impress upon all young Semitic scholars who desire to take up the study of the cuneiform inscriptions to begin at the beginning, to learn thoroughly the alphabet and grammar of the Assyrian language before they attempt independent translation, and only gradually to ascend into those higher regions of inquiry which will be brought before the section by the experienced scholars around me.

M. Jules Oppert then occupied the Congress by a long discourse lasting nearly an hour, and in the French language, upon a most abstruse subject connected with Assyriology, a subject the purport of which scholars educated up to the mark might, in their private studies after reading and reflection, understand, or fancy that they understand, in part or entirely. His manner was excited: his pronunciation rapid even for a Frenchman; he covered a lecture

board with figures at a rate baffling all power of calculation ; and the mixed audience, more or less imperfectly acquainted with the subject and the language of the speaker, were thoroughly wearied. But a fresh surprise was in store for them, when Professor Schrader rose and addressed the Congress in German, thus limiting the intelligent audience still further, and he was understood to combat some, if not all, the assertions of his predecessor. The assembly felt, that they had fallen from the frying pan into the fire in thus exchanging German for French ; and, as no attempt was made by means of an interpreter to give the audience a brief abstract of the statements of either speaker in the English language, many, until the publication of the *Athenæum* and *Academy*, and a still larger number up to the present moment, remained absolutely ignorant as to what they had been listening to ; and the feeling was, that it would have been far better to have treated such papers "as read," the fate, indeed, to which Mr. Geldart's thoughtful paper was condemned. This, however, opened out the whole question of the utility of such Congresses, as it became clear that this afternoon there had been a triangular duel betwixt English, German, and French, in a manner that no one could approve but an Irvingite, and unmindful of the precepts of the Apostle Paul :—

"If any one speak in an unknown tongue, let one interpret : for, if I know not the meaning of the voice, I shall be unto him that speaketh as a barbarian, and he that speaketh shall be a barbarian unto me."

We fear that, with the exception of a few gifted trilinguals, all were in turn barbarians on the second day of the Oriental Conference.

The precious hours of the day on Wednesday were totally wasted for all purposes of the Conference. The Mahomet of the day instead of coming to London, was pleased to summon the mountain to Wimbledon to partake of a crowded breakfast ; thence some drifted away to the Kew Gardens, and it was not till the late hour of 8-30 P.M. that the learned body was again assembled in another part of London, in the Theatre of King's College, Strand. There was no possible advantage to be obtained from this senseless shifting of the meeting-place of the Congress. The subject to be discussed also was confused and anomalous—the so-called "Turanian" languages : which are by some supposed to comprise all the languages of the world, other than Semitic and Aryan : by others the name is narrowed down to the agglutinative and monosyllabic languages : a third party attempt to give still narrower geographical limits to the term, which at best is a bad one. Sir Walter Elliot, late of the Madras Civil Service, and one of the most accomplished servants of the Indian Government was

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in the chair ; and exercised the self-denying grace of not reading his inaugural address, but laying it on the table to be printed with the Proceedings. It is well worthy of being read, though it goes over ground more or less familiar to the student : one passage we quote, to show that the speculation of the author is equal in daring to that of any in this age of daring speculation.

"I think it probable, that the Turanian occupation of Australia took place at a time when that great country still formed an integral part of Asia ; and that, cut off by later geological changes, the inhabitants have thus not been subjected to foreign innovations. A critical examination of their numerous dialects with those of the barbarous hill races of Asia, the Ainos of Japan, the Kols, the Mericossic, and the nomadic tribes who still wander over India, may yield materials for tracing more completely the origin and ramifications of the Turanian race." *Credite Posteris !* Such words half a century hence may be quoted as prophetic wisdom, or set aside scornfully as mere folly.

Professor Hunfalvy, a Hungarian of Pesth, brought the Congress back from theory to hard facts. His address was delivered in a foreign language, and up to this time his remarks have not appeared at length in print : the following is the précis of his argument, and it may be added, that this special work is one, which Europe may fairly demand from the Hungarian nation, who alone in Europe represent without doubt the Turanian race and are advanced themselves into a high state of civilisation.

In this paper Professor Hunfalvy showed by numerous facts adduced from Hungarian, Wogul, Ostiak, and Finnish that the established notion of Turanianism seems to be not well founded, and that it leads students into many errors. The author endeavoured to show, consequently, that the same genealogical method of studying which has created the Aryan and Semitic linguistic sciences also must be applied to the Turanian languages, and that before such a perfect science can be formed every comparative study of them must be unavailing.

The Congress then listened to a paper in English, short, terse, and admirably delivered, by the Rev. Isaac Taylor on his theory of the connection of the Etruscan language with the Ugro-Altaic group, on the confines of Europe and Asia in the Russian dominions. He wished to show a connection of the extinct Etruscan, with the equally extinct Sumerian and Accadian, a language which has been disinterred by Assyriologists within the last ten years, and which is slowly but with certainty being worked out. The nature of the theory propounded by Mr. Taylor is thoroughly understood, but is sternly opposed by Aryan, Semitic, and Turanian scholars : the paper was received in silence, after a few remarks by Dr. Cull, the representative of the Semites, and Professor Hunfalvy of the Turanians, expressing their entire

dissent, especially as all that is known of Etruscan does not exceed half a hundred words, chiefly proper names.

The Reverend Joseph Edkins, one of the most advanced of the Chinese scholars, who ventures to go beyond the mere knowledge of the language into the great arena of comparative language in his work on the "Position of the Chinese among Languages," then interested such of the Congress as could understand English, and had an elementary knowledge of Chinese, with a paper on "the Chinese language at the time of the invention of writing." We quote an abstract of his argument, commending it to the consideration of our readers, as opening out new vistas of thought, with reference to the remarks quoted above as the subject of Egyptian hieroglyphics. Slowly and surely the great ideographic mystery is being solved, and the gradual development of the human mind is being traced in those independent channels, the Chinese, Egyptian, and Assyrian:—

The date of the written character of the Chinese is said by themselves to be 2300 B.C. There has been some difference of opinion as to whether this date should be accepted. The reader of the paper stated that, in order to leave sufficient time for the development of that language since the invention of writing, it is best to accept the native date, as not being too ancient. The celebrated Buddhist pilgrim Hiuen Tsang translated several Sanskrit works into Chinese 1200 years ago. His way of writing Sanskrit names with Chinese characters shows what sounds were attached to those characters at that period. A little before his days the Chinese learnt from Hindoo missionaries, for the first time, the way to spell words with the help of the alphabet. A second period of 1200 years takes us back to the time of the old Chinese poetry, recently translated by Dr. Legge. That poetry was in the simple vernacular of the time, and was arranged in short lines all carefully rhyming together. By this aid we learn what the language then was, and how the Chinese characters were then pronounced, their meaning, and which of them were occasionally changed one for another. Another similar period of 1200 years carries us back nearly to the traditional date of the invention of writing. Proceeding carefully with the information thus acquired on the characteristics of the language at the two epochs named, we may attack the characters themselves to learn whether they can tell us anything as to what that language was which they were invented to represent. After a thousand or more ideographs had been formed by drawing pictures in outline of natural objects, and suggestive groupings of strokes to represent the verbs, the Chinese attached the sounds of the objects or actions to the pictures, and then advanced another step. That step was to use about 1,000 select ideographs as signs of sound. For instance, *bak* was the word for the "white," *pak* for "a cypress" and for "the soul." Having a symbol for whiteness called *bak*, the Chinese made it the sign for a cypress and for the soul also, adding the sign for "wood" for the one, and that for "demon" for the other. By examining the mass of compound characters thus constructed, it is possible to restore the pronunciation as it was at the date of the invention. Every word has changed its sound in the *interim*. A large number of remarkable letter changes have grown up and run their course. By the application of the principle of phonetic writing just stated, the ancient language was, as it were, photographed, and the photograph can be deciphered by the philologist. The laws of intervening

change was estimated, and the language restored to its primitive state, as far as regards many of its essential features. A brief statement was then made as to the civilisation of the ancient Chinese, as mirrored in their old vocabulary. It shows that they had then a full supply of abstract terms and words suitable for political ideas and for moral conceptions. They had decimal arithmetic, names of weights and measures, gold, silver, iron, and other common metals, and a stock of words suitable for the weaver of silk and linen, the boatman, the agriculturist, the carpenter, and the mason. The reader stated it as his conviction that the intuitive origin of moral ideas is decidedly favoured by the Chinese etymology of words having a moral meaning, and that the Darwinian method of accounting for men's notions of morality will gain no support from the Chinese language. Examples were given and briefly discussed.

From the stand-point of our present knowledge we look back with some feeling of pity on the groping in the dark of Sir William Jones and Anquetil de Perron. In the year 1974 what will be thought of the remarks made in this Congress?

The last paper was also in English, and on a very technical subject, *viz.*, "the result of an examination of Chinese-Buddhist books in the library of the India Office." We remarked signs of dull dissatisfaction in the faces of many of the learned foreigners, who sat through these tedious hours, listening to unknown tongues, unrelieved by any bright passages of arms, or intellectual skirmishes. There was a general feeling that there was something wrong in the first principle on which the Congress was organised—and yet no blame could attach to the President of the section, who in a spirit of laudable self-negation held his peace, nor to those who addressed the Congress, for they spoke clearly and well on interesting subjects,—some one should have risen up and cast a ball of contest, which would have brought to their legs in quick succession the most distinguished of the scholars present, whose words should have been rapidly interpreted: that such a procedure can succeed, has been evidenced at other International Congresses.

The next day, Thursday, was thoroughly devoted to the proper work of the Congress. The inspection of the treasures of the Soane Museum, and of the India Office Library, occupied the morning. Weeks might be spent with profit in the latter, which, under the supervision of its present Librarian, Dr. Reinauld Röst, is assuming its proper position, as one of the three great reservoirs of Oriental learning in England—the other two being the British Museum and the Bodleian. After-ages, and scholars yet to be born, will learn to speak with gratitude of the labours of the catalogue-makers of the last twenty years. A great blunder was committed by the President of the Congress in inviting guests to a private re-union at the British Museum, at the very time when the President of the Aryan section was about to deliver his inaugural address; and a still

greater blunder was committed by Dr. Max Müller in occupying the Congress with a long address in English. He was one of the happy few, who could have struck off brief, but striking passages in English, and then electrified his audience by gracefully repeating them in French and reiterating them in his native language: it was an opportunity for a "tour de force" which a vain man would have sought for, and which would have been hailed as the master-stroke of the Congress; and English, French, and German, would have united in praising that "trilingual hero," who could captivate equally his hearers at Paris, at Strasburg, or in London. But he lost his opportunity: all that falls from his lips is valuable, though to those who have heard him often, there is an amount of sameness, or what is called with reference to great painters, "mannerism." We seem to know his stock illustrations, and could finish his half uttered sentences from our own knowledge of the man's mind.

He commenced, as if he were President of the Congress, not of the Section only, and proceeded to give his views of the *raison d'être* of such meetings. We quote his words, as expressing what we consider to be their real and only object.

"The first question which the world never fails to address to us, is *Dic cur hic?* Why are you here?—or to put it into French, What is your *raison d'être*? We have had to submit to this examination even before we existed, and many a time have I been asked the question, both by friend and foe, What is the good of an International Congress of Orientalists? It seems to me that the real and permanent use of these scientific gatherings is twofold:—(1.) They enable us to take stock, to compare notes, to see where we are, and to find out where we ought to be going. (2.) They give us an opportunity, from time to time, to tell the world where we are, what we have been doing for the world, and what, in return, we expect the world to do for us. The danger of all scientific work at present, not only among Oriental scholars, but, as far as I can see, everywhere, is the tendency to extreme specialisation. Our age shows in that respect a decided reaction against the spirit of a former age, which those with grey heads among us can still remember, an age represented in Germany by such names as Humboldt, Ritter, Böckh, Johannes Müller, Bopp, Bunsen, and others; men who look to us like giants, carrying a weight of knowledge far too heavy for the shoulders of such mortals as now be; aye, men who were giants, but whose chief strength consisted in this, that they were never entirely absorbed or bewildered by special researches, but kept their eye steadily on the highest objects of all human knowledge; who could trace the vast outlines of the kosmos of nature or the kosmos of the mind with an unwavering hand, and to whose maps and guide-books we must still recur whenever we are in danger of losing our way in the mazes of minute research. At the present moment such works as Humboldt's *Kosmos*, or Bopp's *Comparative Grammar*, or Bunsen's *Christianity and Mankind*, would be impossible. No one would dare to write them, for fear of not knowing the exact depth at which the *Protogenes Haeckelii* has lately been discovered or the lengthening of a vowel in the *Sanhitapátha* of the *Rig-veda*. It is quite right that this should be so, at least for a time; but all rivers, all brooks, all rills, are meant to flow into the ocean, and all special knowledge, to keep it from stagnation, must have an outlet into the general knowledge of the world. Knowledge

for its own sake, as it is sometimes called, is the most dangerous idol that a student can worship. We despise the miser who amasses money for the sake of money, but still more contemptible is the intellectual miser who hoards up knowledge instead of spending it; though with regard to most of our knowledge, we may be well assured and satisfied that, as we brought nothing into the world, so we may carry nothing out. Against this danger of mistaking the means for the end, of making bricks without making mortar, of working for ourselves instead of working for others, meetings such as our own, bringing together so large a number of the first Oriental scholars of Europe, seem to me a most excellent safeguard. Oriental literature is of such enormous dimensions that our small army of scholars can occupy certain prominent positions only; but those points like the stations of a trigonometrical survey, ought to be carefully chosen, so as to be able to work in harmony together. I hope that in that respect our Congress may prove of special benefit. We shall hear, each of us from others, what they wish us to do. "Why don't you finish this?" "Why don't you publish that?" are questions which we have already heard asked by many of our friends. We shall be able to avoid what happens so often, that two men collect materials for exactly the same work; and we may possibly hear of some combined effort to carry out great works, which can only be carried out *viribus unitis*, and of which I may at least mention one, a translation of the *Sacred Books of Mankind*. Important progress has already been made for setting on foot this great undertaking, an undertaking which I think the world has a right to demand from Oriental scholars, but which can only be carried out by joint action. This Congress has helped us to lay the foundation-stone, and I trust that at our next Congress we shall be able to produce some tangible results. I now come to the second point. A Congress enables us to tell the world what we have been doing. This, it seems to me, is particularly needful with regard to Oriental studies which, with the exception of Hebrew, stand still outside the pale of our schools and Universities, and are cultivated by the very smallest number of students. And yet I make bold to say that during the last hundred, and still more during the last 50 years, Oriental studies have contributed more than any other branch of scientific research to change, to purify, to clear, and intensify the intellectual atmosphere of Europe, and to widen our horizon in all that pertains to the science of man, in history, philology, and philosophy. We have not only conquered and annexed new worlds to the ancient empire of learning, but we have leavened the old world with ideas that are already fermenting even in the daily bread of our schools and Universities."

He goes on to show what a change in our thoughts has been produced by the discovery of the "comparative method," which was only possible when the revelation of the Oriental store of knowledge gave to the European student the power of "generalising," in language, mythology and religion. On the latter of these topics his words are pregnant, though startling, and foreshadow what may be expected from an historical treatment, on a basis as broad as that of the whole world, of this important subject.

All religions are Oriental, and with the exception of the Christian, their sacred books are all written in Oriental languages. The materials, therefore, for a comparative study of the religious systems of the world had all to be supplied by Oriental scholars. But far more important than those materials is the spirit in which they have been treated. The sacred books of the principal religions of mankind had to be placed side by side with perfect impartiality in order to discern the points which they shared in common as well

as those that are peculiar to each. The results already obtained by this simple juxtaposition are full of important lessons, and the fact that the truths on which all religions agree far exceed those on which they differ has hardly been sufficiently appreciated. I feel convinced, however, that the time will come when those who at present profess to be most disquieted by our studies will be the most grateful for our support; for having shown by evidence, which cannot be controverted, that all religions spring from the same sacred soil, the human heart, that all are quickened by the same Divine spirit, the Still Small Voice; and that, though the outward forms of religion may change, may wither and decay, yet, as long as man is what he is and what he has been, he will postulate again and again the Infinite as the very condition of the Finite, he will yearn for something which the world cannot give; he will feel his weakness and dependence, and in that weakness and dependence discover the deepest sources of his hope, and trust, and strength.

Wandering still further from the section, over which he was presiding, the learned Professor turned his attention to the neglect which Oriental studies met with in England, and specially at the Universities which ought to be the metropolis of all knowledge, but which selfishly and sordidly forgetful of their high mission, stifled the free study of Hebrew under a load of one-sided and sectarian Theology, and neglected all the languages of the world in favour of Latin and Greek. He pointed out, how much Foreign Missions would profit by facilities of acquiring foreign languages at the Universities, how much knowledge had to be caught alive while there was yet time, arrayed, and published, by men who possessed learned leisure, the very class for whom the emoluments of Fellowships were intended: the following remarks require serious considerations:—

Some years ago I ventured to address the Colonial Secretary of State on this subject, and a letter was sent out, in consequence, to all the English colonies, inviting information on the languages, monuments, customs, and traditions of the native races. Some most valuable reports have been sent home during the last five or six years; but when it was suggested that these reports should be published in a permanent form, the expense that would have been required for printing every year a volume of colonial reports, which would not have amounted to more than a few hundred pounds for all the colonies of the British Empire, part of it to be recovered by the sale of the book, was considered too large. Now we should bear in mind that at the present moment some of the tribes living in or near the English colonies in Australia, Polynesia, Africa, and America, are actually dying out, their languages are disappearing, their customs, traditions, and religions will soon be completely swept away. To the student of language the dialect of a savage tribe is as valuable as Sanskrit or Hebrew, nay, for the solution of certain problems, more so. Every one of these languages is the growth of thousands and thousands of years, the workmanship of millions and millions of human beings. If they were now preserved they might hereafter fill the most critical gaps in the history of the human race. At Rome, at the time of the Scipios, hundreds of people might have written down a grammar and dictionary of the Etruscan language, of Oscan, or Umbrian; but there were men then, as there are now, who shrugged their shoulders and said: What can be the use of preserving these barbarous, uncouth idioms? What would we not give now for some such records?

As by careful and complete collections of every article used by the tribes in the lowest state of civilisation at the present moment, the cautious palæontologist builds up his theories as to the habits of the whole human race in its infancy, so by a careful analysis of the feeble and unartificial means of vocal communication adopted by savages, the cautious philologist frames his theory as to the origin of all languages, and is enabled to arrive at the processes, by which the varying inflexions of words were introduced to represent the logical requirements of the human mind, and to guess at the origin of words themselves.

The Professor rendered due homage to the unceasing and discriminating liberality ever shown by the Government of India to Oriental study, and he draws attention to the three surveys now in progress in India :—the literary survey, for the collection and cataloguing of manuscripts : the archæological survey, and the ethnological survey ; and here his remarks are of such practical utility, that they must be quoted.

“We want not only photographs and graphic descriptions, but scholar-like grammars of the principal races of India. Lists of words, if carefully chosen, are no doubt most valuable for preliminary researches, but without grammars none of the great questions which are still pending in Indian ethnology will ever be satisfactorily and definitively settled. No real advance has been made in the classification of Indian languages for twenty years ; * * * * why do not the German Missionaries at Ranchi publish a grammatical analysis of that interesting cluster of dialects ?

“Without wishing to defend the names chosen for these classes, I must say, that I look on the constant introduction of new technical terms, as an unmixed evil : every classificatory term is imperfect, but if they are rightly defined, they can do no harm ; whereas a new name, however superior at first sight, always makes confusion more confounded. Chemists do not hesitate to call sugar an “acid,” rather than part with an old established term.”

The Professor then laid on the table the last sheet of the text of the Rig Veda, the oldest book of the Aryan world, a work commenced a quarter of a century before, and prosecuted continuously ; and he closed his long and learned oration (for in many places he was above the monotonous level of a lecturer) by assigning to the Vedas their proper position. The Rig Veda is valuable, and priceless, not because it is *not* like the Psalms, and *not* like Pindar, but because it stands alone by itself, and reveals to us the earliest germs of religious thoughts, such as “they really were ; it is because it places before us a language more primitive than any we knew before ; it is because its

"poetry is savage and uncouth, showing us what man was, what we were before we had reached the level of David, of Homer, of Zoroaster, showing us the very cradle of our thoughts, our words, and deeds."

Professor Stengler of Breslau then read a paper in the German language on the Hindu Doctrine of Expiation: the German portion of the audience, including His Highness Prince Charles of Roumania, had their revenge on the English and French "monoglots" by understanding the words, if not the arguments of the learned Professor. The Syrian Patriarch, and his Suffragan, the Bishop of Jerusalem, who knew literally nothing but their own Arabic, got through this and the meetings of the other days with singular patience, and a look of polite semi-intelligence: no doubt the habitual attendance of a form of religious worship in a language totally unintelligible to themselves or their congregation, does help a person to play the otherwise awkward part of a lay-figure in the midst of an assembly of great intelligence, with dignity and self-respect, and they were able to maintain during discussions, which they could not comprehend, the same reverend, easy and polite appearance, which they presented the previous day at the public breakfast, of which they were unable to partake.

Professor Haug, a scholar of the greatest distinction, well-known at Bombay, and one of the most advanced scholars of the day, followed with a paper on the interpretation of the Veda; a subject of the greatest interest, but which no one can pretend to understand, who is not *educated* up to it, in the sense in which Mr. Disraeli pretends to educate his party to the level of his own political conceptions. Here a new difficulty met the Committee. The Professor is an excellent English scholar, and has written books in English in the most perfect style; but his pronunciation of English was such as can only be compared to the barking of a dog, and was perfectly unintelligible both to English and Germans: his paper also was inordinately long; and these two facts point to another rule for future Congresses, that the abstract of papers should be read rather than the whole production, with a rigidly-kept allowance of time, and that the Committee use a wise discretion in excluding those, however distinguished, who have not the divine power of addressing public audiences. We doubt not that to every word of Professor Haug, as it appears in print, the learned give their entire assent, and to no single proposition of Mr. Isaac Taylor in the Turanian Section did a single member yield even a conditional concurrence, yet the words of his address fell upon the audience with smooth and grateful cadence, and every word was heard and understood by every one who understood the English language.

Mr. Shunkur Pandurang Pandit addressed the Congress on

Hindu Law and its bearings on Violation of Caste: we would gladly have made remarks on the expressed sentiments of the representative of India, as his appearance was singularly prepossessing, his manner modest, his language well chosen, and well-pronounced; but nothing, not even an outline, has appeared up to this date of his papers, though we are promised at some future date a *verbatim* official report, which will, probably, appear when the interest and memory of the Congress has passed away.

Professor Thibaut then read in the English language a paper on the Culva Sutras, a class of writing which contains "the very first beginning of geometry among the ancient Indians." In a sad and subdued tone, this obscure and uninteresting treatise fell upon the audience like the last straw on the camel's back; and it fairly melted away under its influence.

By consent, however, a special adjourned meeting of the Aryan section was held on Friday morning at an early hour, and a practical paper was read by the Rev. Dr. Mitchell "on the Difficulty of rendering European Ideas in Eastern Languages." This was followed by a paper by Mr. Shunkur Pandurang Pandit, "on the Age of the Great Sanskrit Poet, Kalidasa." Two further papers were laid on the table, one by Dr. Wise on the "Ancient Systems of Hindu Medicine," and one by Colonel Ellis "on Certain Disputed Points of Indian History."

Baron Textor de Ravisi then raised a question regarding the chronology of India, founded upon an inscription on the Pagoda of Udaipur: his main object was to have this important inscription photographed, as at present the copies differed materially, and according to one version, a great revolution in the order of chronological events at present received, would be effected. As the requisition of the Baron is a simple one, there can be no doubt that it will be complied with.

On the table of the Congress were exposed to public view by Dr. Eggeling, the learned Secretary and Librarian of the Royal Asiatic Society, some of the extremely curious and valuable manuscripts belonging to that institution, or intrusted to them for submission to the Congress. Among others were some ancient Jain palm-leaf manuscripts dating from the 12th to the 14th century A.D., which is about the oldest date which can be assigned for any existing Indian manuscript, showing how far India falls behind Egypt, Greece, and Rome in this particular; nor does India make up for the want of antiquity in her manuscripts by an over-abundant wealth or excessive age of her monuments on stone and metal, as in this particular also she falls centuries behind Assyria, Egypt, Asia-Minor, Arabia, Greece and Italy. In fact, under a closer inspection, the claim of India to high rank among the ancient monumental treasuries of the world has been

entirely set aside, and all that has come down to us in block and stock is comparatively recent. On the other hand, uninterrupted tradition, oral and literary, has done for the great authors of India the same work of conservation, to which we owe the records of the Hebrew nation. Thus closed the Aryan Section. Brilliant as it was in many respects, it lacked that life and conflict of mind with mind, which appears to us to be of the essence of a Congress. We should have liked to have seen some evidences "of the searching and elaborate critical power" of the German, of the "sweetness and light" of the French, of the "practical good sense and sound judgment" of the English, illustrated *vivâ voce* before us: it may be unreasonable on our part, but standing on the highest bench of the theatre of the Royal Institution our eyes fell on the collective Oriental knowledge, (with some splendid exceptions,) of Europe, and we should have liked to have heard the sound of the voice of some of those men, whose faces we may never probably see again.

On the evening of the same day on which the Aryan section was held, the members of the Congress were summoned to the Hamitic Section, and were cruelly treated by being crushed into a small room in Conduit Street, where the members of the Society of Biblical Archæology ordinarily assemble, furnishing another illustration of the deficiency of organisation on the part of the Central Committee. Dr. Birch, the President of the Congress, presided over this, his peculiar section, and there was no lengthy address.

Professor Lepsius, one of the most eminent and experienced Egyptologists, led the way, as indeed his seniority entitled him, for we can ourselves recollect, how, in the year 1843, he and Mr. Bononis, who was also present at the Congress, were engaged in making researches in Egypt, and we came on the Professor, then in his youth, in the act of inscribing in hieroglyphics of his own composition, the praises of the King of Prussia over the entrance to the Great Pyramid of Gizieh, and we recalled the fact to his memory. Since then his special science had made vast strides. He proposed three points for the decision of the Congress, and we are happy to add, that in a special Conference of eight Egyptologists, they were disposed of before the Congress separated, and the decision formally engrossed in a protocol. It is unnecessary to read what these points were, but the circumstance is brought forward, as an instance of the advantage of a Congress.

To return to the Hamitic section, Professor Brugsch Bey, delegate from Egypt, delivered a *vivâ voce* lecture on a subject of great interest, and with a grace of manner and diction that could not be surpassed. By birth a German, and by profession a high official of the Khedive in Egypt, he addressed the audience in French, handling the subject with marvellous "sweetness and light,"

to which the modulation of his voice and the nobleness of his appearance greatly contributed. Every word fell like music on the listeners; and as the subject of the passage of the Hebrews from Egypt to Mount Sinai is one that must interest all, we subjoin an abstract of his remarks, reserving our own judgment on the question at issue.

“Directed by an order of His Highness the Khedive of Egypt, Ismael Pasha, to come to London in order to represent his country at the International Congress of Orientalists, the desire of this Prince was, that I might communicate to the enlightened public of England, who interest themselves in all Biblical questions, the results of my last researches on the sojourn of the Hebrews in Egypt. I have chosen for my theme the exodus of the Hebrews from Ramsés to their arrival at Elim. All *savans*, who have previously occupied themselves with the re-construction of this route, have taken as the basis of their researches the geography of Egypt during the time of the Lower Empire, comparing it with that of our days. So many *savans*, so many different opinions concerning this route. But all, with the exception of two, agree that the Jews went through the Red Sea. My own researches are founded on the geographical indications of Egyptian monuments, contemporary with the time of the exodus. I was able to reconstruct the Egypt of this epoch, with its 42 provinces, with its chief towns, and with a very great number of very curious details of the topography and also of its Divine rites. From this I have arrived at the following conclusions, which I consider unquestionable:—(1.) That the town of Ramsés ‘differs in no way from the town of Zoan,’ which is spoken of in the Bible as the place where Moses performed his miracles before the Pharaoh of his time. This is the same town which the Greeks called Tanès, and which was the chief town of the district Tanitis. (2.) That the town of Pithom, likewise mentioned in the Bible, was the chief town of the adjoining districts, called by the Greeks the district of Sethroïtes. The Semitic name of this same town, cited in the papyri of the British Museum, was Suko or Sukoth, which corresponds exactly with the second station at which the Hebrews camped after their exodus from Ramsés. (3.) The third station, called in the Bible Etham, bears the name of Hetham in the Egyptian texts; the name means ‘the fortified.’ This fort was situated westward from the place el-Kahtareh (*i.e.*, the bridge) of to-day on the confines of the desert. After having arrived at Etham the Hebrews turned to the North, and arrived then at (4) Migdol, which was the fourth station. The name is completely Egyptian, and means the fortress Magdolon of the Greek and Roman authors, situate at Tel-e-Semout of our day. Setting out from Migdol the Hebrews camped between Migdol and the sea (*i.e.*, the Mediterranean) before the entrance of the Hiroth (Pi-hahiroth), in face of Baal Zephon. The Hiroth, an Egyptian term, denotes those fearful abysses situated between the Mediterranean Sea and the Lake Sirbonis. The place of Baal Zephon, in Egyptian Baali Zapouna, is the name of a sanctuary situated at the Casian Mount. As Pharaoh and his army pursued the Hebrews on this isthmus between the sea and the lake of Sirbonis, to which the inscriptions give, as to all lakes even to the Red Sea, the name of Sea of Algæ (jam Suph) there befel the Egyptians at those places the same fate which, in the course of history, befel single travellers as well as whole armies—they were swallowed by the abysses of the sea of Algæ or Weeds. Once arrived at Mount Kasios, where was the Eastern frontier of ancient Egypt, and where the ‘way of the Philistines’ begins, the Hebrews traversed, in a southern direction, the desert to Marah, ‘where the water was bitter.’ These are the Bitter-water Lakes of our day. The sixth

station, Elim, is called in Egyptian 'A-lim' (i.e., the town of 'fishes'), to the north of the Red Sea. All these indications exactly correspond in Hebrew and in Egyptian. No *savant* can separate them from one another nor alter the site now fixed once for all. The Egyptian papyri and monuments teach us equally—that the Egyptian title of 'Zaphnatphanekh,' borne by Joseph, is to be found in Egyptian under the form of 'Zaphu-net-phaankh,' signifying The governor of the district Sethroites; (2) that the second title of Joseph, Ab of the Pharaoh, is Egyptian; it signifies, 'The first officer of the House of Pharaoh'; (3) That the town Pithom worshipped God under the name 'The living God,' which corresponds exactly with the meaning of the name 'Jehova'; (4) that a serpent of brass, called Kereh (the polished), was regarded as the living symbol of God. This is without doubt the serpent of Moses, the rite of which prevailed at Jerusalem until the time of the King Hezekiah. The papyri inform us likewise that the Hebrews, intermixed with other people of Semitic origin, inhabited during their sojourn in Egypt the districts of Ramsés and of Pithom; that they were compelled to build certain constructions in both of these towns until Moses delivered them 'out of the house of their bondage.' As the Jewish legislator performed his miracles before Pharaoh, the latter gave the order to his 'kartoumim' (i.e., thaumaturges) to do the same. We meet once more a name which is Egyptian. The word in question signifies 'high priests' of the town of Ramsés. This coincidence here is again perfect. The name of the Hebrews, which some have proposed to compare with a word 'Apiru,' cited in the Egyptian texts, does not exist; at least, nobody has met with it until now. But the name of Moses (in Hebrew Moshé) is to be found in the name of a place called 'Isle of Moshé,' which is situated on the right border of the Nile, in the Heptanome. The Roman itineraries have designated it by the name of Musac or Mouson. Science cannot decide whether the Jewish legislator was meant or an Egyptian of the same name."

The attention of the Congress was then drawn by the Baron Textor de Ravisi to the important publications of the Societies of Algiers. Northern Africa, like the rest of the world, has in these last days been compelled to give up its treasures of monumental inscriptions in the Berber and Punic languages, and the French rulers have not been found wanting to work this rich and virgin field.

Next followed a discourse by a really eminent man on a subject of unusual interest. Professor Ebers, one of the greatest of Egyptologists, described briefly the nature and contents of the great "Medical Papyrus" which he had obtained at Thebes, and was about to publish; but alas for the hearers! The lecturer spoke only very rapid and very guttural German, and the only sound which many took home with them, was the oft-repeated word, "Papeeroos." It appears that this marvellous book consists of 110 pages without a single character wanting, and in a wonderful state of preservation: it is the only complete book from the time of the Pharaoh. Its date is firmly attributed to 1600 B.C. The contents furnish a favourable testimony to the knowledge and industry of the ancient Egyptian medical men; the men, we must remember, who embalmed the bodies of Joseph and Jacob, for to

that date we are carried back, and the book is full of quotations from still older authors. For students of old Egyptian grammar, this book is of surpassing value, and great additions are made by it to the vocabulary. Facsimiles of this venerable monument have been made, which have given its contents an unlimited lease of future life; and art has become the handmaid of science to such an extent, that under the new process, it is really difficult to distinguish the facsimile from the original. In a few months the whole work with a translation and glossary will be before the public.

Professor Eisenlohr then read a paper on the contents of the mathematical Papyrus of the British Museum, which is a copy made 1700 B.C. of an original assigned to 2000, a date anterior to the call of Abraham. It must be remembered, that these astounding facts are stated by Germans from a manuscript in the custody of Dr. Birch in the British Museum, and in the presence of the French *savans* themselves, the earliest and most indefatigable in the field of Egyptology. The boldest may well hold their breath for a time, and wish that their lives might be extended to enjoy the strength which the next quarter of a century must pour into the lap of the survivors, the happy inheritors of the treasures of this generation of industry and ingenuity.

Papers were then laid on the table on the Royal tombs of Abydes, and the proportions of the great pyramid of Gizeh. A few remarks were made on a purely technical matter by Professor Lieblein of Christiania, and Professor Duemichen; and the meeting closed, to which, perhaps, the palm of superiority over all other meetings of the Congress must be conceded: and, if only an interpreter could have stood forward, and rapidly communicated the nature of the remarks made in foreign languages, the pleasure would have been complete, as it would have been shared by all.

On Thursday the Congress again met in the theatre of the Royal Institution for the Archæological Section. Mr. Grant Duff, M.P. for the Elgin Burghs, and late Under-Secretary of State for India, was in the chair; to which, however, he was well entitled by the intelligent interest which he had manifested in the subject, and by the excellent address with which he commenced proceedings, an address not dealing with generalities, but conveying a great deal of new and interesting information. The subject of archæology is truly gigantic, and only came before the Congress, as a matter subsidiary to the real objects of the meeting, which were strictly linguistic; but the aid of the archæologist, the palæontologist of man's works, the numismatist, and the palæographist, are essential to the linguist.

Mr. Duff at once narrowed the subject to British Indian archæology, excluding the vast fields of Algerine, Egyptian, Cypriote, Syrian, Assyrian, Ephesian and Trojan discoveries, each of which would form a subject for a day's tournament: he described to the Congress what steps the Government of India had taken to set on foot an archæological survey, the details of which are well known to the readers of the *Review*, but were new and interesting to many foreign members of the Congress, specially the discovery of Bharahut in the Deccan by General Cunningham. It is right to place on record the classification of styles of Indian architecture, which he has made as the result of his extensive researches.

HINDU STYLES.

1. Archaic	from	1000 B.C.	to	250 B.C.
2. Indo-Grecian	"	250	"	57 "
3. Indo-Scythian	"	57	"	319 A.D.
4. Indo-Sassanian	"	319 A.D.	"	700 "
5. Mediæval Bráhmans	"	700	"	1200 "
6. Modern Bráhmans	"	1200	"	1750 "

MOHAMEDAN STYLES.

1. Ghorí Pathán	(overlapping arches)	1191 A.D.	to	1289 A.D.
2. Khiljí Pathán	(horse-shoe arches)	1289	"	1321 "
3. Tughlak Pathán	(sloping walls)	1321	"	1450 "
4. Afghán	(perpendicular walls)	1450	"	1555 "
5. Bengali Pathán		1200	"	1500 "
6. Jaunpuri Pathán		1400	"	1500 "
7. Early Mughul		1556	"	1628 "
8. Late Mughul		1628	"	1750 "

Mr. Duff gave due praise to the Editor of the *Indian Antiquary*, a periodical which cannot be spoken of too highly. He also stated emphatically that the Government of India had not neglected their duties as custodians of the archæological treasures of India as, indeed, is well-known to all who are acquainted with India: there is, indeed, a limit, within which the action of an absolute Government is restricted, and it is monstrous to suppose that any Government could undertake to keep in repair all the tombs, mosques, temples, gateways, palaces, and forts, which their predecessors had erected with lavish hand in every part of India, many also being of second or third rate importance, while some few were of surpassing excellence and interest. We extract Mr. Duff's words:—

I am convinced that with every decade we shall have a better and better report to give of the care which is being bestowed by the present rulers of India on the works of their predecessors. We are fond of denouncing ourselves for want of proper attention to these matters. There are

few things that Englishmen like so little as being denounced by other people, but there is nothing that they like so much as denouncing themselves. Cool-headed observers, however, looking at the enormous amount of absolutely necessary work that had to be done before the first beginnings of a civilised polity were laid in India, which was rapidly going to utter ruin when we first grew strong there, will be inclined to condone our insufficient attention to the preservation and illustration of ancient monuments in the past, if we only now attend to them sufficiently; and having had the opportunity of seeing a good deal behind the scenes in matters Indian, I think I may say very positively that those who administer the Government of India consider themselves more and more in all things relating to science, art, and literature in India as trustees, not only for their own countrymen and for India, but for the whole civilised world. That is a view which I strongly hold myself, and which, should circumstances again place me in an influential position in connexion with the Government of India, I shall always do what I can to carry into effect.

Dr. Eggeling, Secretary of the Royal Asiatic Society, then read a most interesting, and suggestive paper on the inscriptions of Southern India: "Literary documents, Sanskrit, or Vernacular, "are scanty and untrustworthy: these inscriptions became the "sole reliable evidence, and it was satisfactory to know that there "were thousands of inscriptions both on stone and copper plates, "scattered all over India, especially in the Deccan, an examina- "tion of which might be expected to throw light on many a dark "point of Hindu chronology." It was suggested that some general and systematic plan might be adopted to render Indian inscriptions accessible to European scholars by means of faithful *photographs*, for nothing less than that would now satisfy students: and these photographs should be taken on sufficiently large a scale to allow of the closest scrutiny of each bend of the letter, and each spot, and should be taken with reference solely to the inscription, and not the architectural surroundings; thus gradually a great *Corpus inscriptionum* for the whole of India would be worked out. It is only to be added that the whole world has in these last days gone mad after inscriptions on the rock, on stone tablets, on metal, and on pottery; and behind, or rather before, the archæologist and the inscription-hunter, stalks the pest of modern times, "the forger," and the literary journals of Europe resound with controversies over treasures alleged to be false, and warnings against rash and hasty purchasers.

Papers were then laid on the table by Professor R. G. Bhandakar of Bombay, on the "Nassick inscriptions;" by Mr. Hyde Clarke on the ancient river-names of India, and "their relation with similar names in America;" and by Professor Leitner on Greco-Buddhist sculptures. Thus closed the archæological section.

On the following day, Saturday, the last of the Congress, after visiting the Kensington Museum, the company came together to hear Professor Owen in the Ethnological Section. This section

was also quite subsidiary to the main object of the Congress, and considering the limited time for the real work of the meetings, might have been dispensed with. The venerable form and learned words of Professor Owen may be seen and heard elsewhere, and every day; and the inordinate length of his address seemed to paralyse the frames of all. What he said, might have been said in fewer words, and yet not have lost their solemn and startling effect on the casual hearers. The days of the school of Archbishop Usher are numbered; the duration of mankind is found to extend over periods of thousands of years, instead of hundreds; the deluge is localised, and did not include Egypt; and vast changes have been made in the geological features of the globe since the creation of man. Such and such were the doctrines of the old man eloquent, propounded to the collected Oriental wisdom of Europe, doctrines which must neither be rejected with scorn, nor accepted in blind trust; like other great truths they must be sifted, and thought over, and discussed in this generation to form the foundation of accepted facts in the next.

We make some brief extracts from this most important address.

"Zoological and geological evidences concur to point out a pre-historic race of mankind, existing generation after generation on a continent, which in course of gradual geological change, has been broken up into insular patches of land; there such a race is still open to ethnological study. * * * I would impress upon ethnologists to set aside ideas of the actual disposition of land and sea as being necessarily related thereto, and to associate with the beginning of such forms (of humanity) a lapse of time in harmony with the latest geological change of the earth's surface."

"Fain would I have found facts to square with this conscience-enforcing principle, and hard was the struggle against the pre-possession of sacerdotal education in being brought by the cause of daily duty face to face with phenomena, subversive of the idea of the distribution of mankind from the plains of Shinar at the Biblical date of the building of Babel."

"In our present palæontological evidence of the antiquity of the human race, seven thousand years seem but a brief period to be allotted to the earliest, the oldest civilised, and governed community." "Physiology compels a retrospect far beyond historical periods of time for the establishment of these varieties (of the human race.)"

We quote these words as a faithful chronicle of the most important facts carried away by the members of the Congress to their countries, their kindred, and their studies. The report of the Congress will appear in all the great languages of Europe, and

be studied and referred to by men of a great variety of intellectual development. At the same time the *Times* and the other great organs of public intelligence published the address, and gave it a circulation over the whole world. Professor Owen must have felt the importance of the time and the occasion; arrived at three score and ten, he announced solemnly the results of study and reflection extending over half a century, widened by travel and association with the most learned of Europe—and in this lies the deep importance of his statements.

Dr. Forbes Watson, Keeper of the Indian Museum, then read portions of his memoir on the "Foundation of an Indian Institution for Lecture, Inquiry and Teaching." M. Leon de Rosny, the President of the First Congress at Paris, read a paper "on the most ancient Chinese palæography." He maintained that "he had determined the ancient phonetic form of the Chinese spoken language: he had also proved that the writing, commonly called 'ideographic' was not a writing composed of images (like that of the ancient Mexicans), although reported so in the writing of Sinologists. No inscription can be found with the figurative characters in any of the larger palæographic collections of the Chinese, but in *phonetical* characters, viz., in letters expressing 'sound' and not 'objects' or 'ideas.' The written language had been developed by a special class of literati, who wished to express ideas superior to the state of civilization of former times. They were thus obliged, in order to indicate special shades of thought, to invent a number of different characters, representing the several significations, which they wished to give to each *word* of the spoken language."

Following these important statements with regard to the characters used by one of the oldest nations of the world, uprose a German, Dr. Bachmaier, with the last new invention of the kind, called pasigraphy, a "system of universal writing by means of numbers." As this may also be a genus of a new development of the next generation, we quote a statement of his method, of which he gave a practical illustration, by distributing five hundred copies of his Pasigraphical Dictionary in English, German, and French, gratuitously among the members of the Congress.

The most indispensable words in a given language, "say about four thousand, are numbered, and the same figures are used to denote the respectively equivalent words in another language, thus enabling an Englishman and German, though each may be ignorant of the other's tongue, to exchange ideas in writing."

Mr. Fred. Drew then read a paper "on the Castes and Customs of the Dards;" he was followed amidst the rapidly evaporating patience of the audience, by Mr. Basil Cooper, with an abstruse paper "on the Date of Menes of Egypt;" and by the Rev. J. Long,

so favourably known in Calcutta, with a paper on "Oriental Proverbs and their Use." His suggestion, that no time should be lost in collecting the proverbs floating on the lips of the people of India in so many languages, was practical and important; and Mr. Long having given publicity to the subject, should lose no time in giving to the world his own collections of proverbs, as a *nucleus* round which an aggregation will soon be formed. There is a deep truth, no doubt, in the remarks made with regard to proverbs which are indeed the words of one man, but the sentiments of a neighbourhood, the laws of old age, the unwritten moral code of a people.

But the Congress was rapidly degenerating into a mob: the Saturday half-holiday movement of London had infected the *savans* of Europe: it was in vain to try to fix attention on any subject. Mr. Duchateau placed on record that a paper of a compatriot which was promised had not arrived; and Professor Jules Oppert from an elevated part of the Theatre, in an excited and theatrical manner addressed the House in the French language, thanking the English members of the Congress for the great and cordial hospitality afforded to them. He further remarked with justice "that the English public had not only received with marked interest the communications made to the different sections, but also the newspapers have filled their columns with the records of the proceedings of the Orientalists, giving their speeches *in extenso*. It is difficult to create, still more difficult to preserve. If to the Paris Congress belonged the merit of inaugurating these great meetings of Oriental scholars; to that of London belongs the honour of having consolidated the undertaking, and of assuring its continued existence."

Small thanks are due to the English press, as in the month of September with general quiet in the Political, Home, Colonial, and Foreign world, the editors were reduced to chronicle abnormal turnips and heavy bags of partridges, and jumped eagerly at the opportunity of airing their knowledge of the East, and filled up columns with facts about philology culled from text-books; but great thanks are due to any Englishmen, who, at a sacrifice of their own arrangements, came from great distances to be present at the Congress.

The last duty of the Congress, which had now become a tumultuous concourse of very noisy atoms, was to decide where the third Congress should be held, and who was to be the President. The Council had deliberated with closed doors in an adjoining house, and come to a decision on both subjects, and the President of the Congress, Dr. Birch, returning to the Lower House, announced in truly Russian absolute style, that there was to be no discussion, no option in the matter, but that the Congress

must accept the place and the man upon whom the Upper House had determined. That place was St. Petersburg, a place well-known for its great and inconvenient distance ; that man was Count Woronzoff Dashkow, well-known for nothing. We are not ashamed to confess our ignorance, as it is shared by the editors of hand-books of contemporary biography, who are pretty liberal in their insertion of names of men, whether really or falsely distinguished. Unquestionably Berlin or Vienna ought to have been the scene of the third Congress, one of the two centres of the great German nation, which has done so much for Oriental research. If owing to the unfortunate national alienation between France and Germany, it was not deemed expedient to select Germany, there were at least the convenient neutral grounds of Geneva or Turin available. Those who have insisted on St. Petersburg, have done so with a great responsibility, as few of Western Europe can afford the time and money for so long a pilgrimage. The announcement was received with manifest signs of dissatisfaction.

Then ended the Congress of 1874. The evening was devoted to a dinner with the Lord Mayor, and post-prandial speeches, which it would be scarcely suitable to chronicle. In a country tolerant of all religions, one "cultus" must not be neglected ; like the "Numen Imperatorum" of the Romans, the worship of the belly-god must be accepted ; so the Germans were hurried off in cabs from their beer and pipes to the Mansion House to look at strange things on their plates, and listen to the characteristic speech of Sir Andrew Lusk, who impressed upon his guests the very low order of sentiment, that dinner was "the touch of nature that made the whole world kin." What a fall was this ! What a lamentable conclusion to the lectures and addresses of Rawlinson, Max Müller, and Owen ! If the miserable necessity of sustaining exhausted nature by periodical supplies were indeed the missing link, of what use the expenditure of brain in compelling antiquity to give up the stores of inscriptions and paintings laid up by races who had aspirations higher than could be satisfied by feasting with a Lord Mayor ? In one respect, however, the arrangements at the dinner were more sensible than those at the Congress, for, when the Lay Figures of the Assembly, who had sat patiently through six days of English, German, and French speeches, without understanding one word, the Patriarch of Syria and his Suffragan responded to the toast of "the health of His Holiness, the head of a church founded by St. Peter, and also of, *perhaps*, the most primitive and simple Christian Church which had come down to the present time," his words were interpreted by one of Her Majesty's Consuls, but their exact purport was not recorded.

Opportunity was taken at the Congress to give publicity and due honour to two institutions, which have done more for propagating correct Oriental knowledge than, we are ashamed to say, either of the Universities of England. One of these institutions was an enterprising publisher, the other the Venerable British and Foreign Bible Society.

Mr. Stephen Austen of Hertford submitted for inspection one hundred and twenty volumes, printed in Oriental and foreign types, in no less than thirty-one languages, in several characters, some of these unique. Many of these books were published as well as printed at the expense of the late East India Company, the British Museum, the Bible Society, the India Office, and private firms. Medals have been awarded at the different exhibitions at home and abroad; but none who have the progress of Oriental knowledge at heart can fail to admit that much is owing to Mr. Austen, an energetic, an enterprising spirit, working no doubt for his own advantage, but certainly in a field occupied by himself alone.

Members of the Congress visited the library of the Venerable British and Foreign Bible Society, a sight not the least worthy to be seen of the many sights of London. What other library can exhibit translations of the Bible in two hundred languages, ranging over the whole field of philology, from the monosyllabic to the polysynthetic, from the finished Sanskrit, which is the result of the labour and ingenuity of centuries, to the poor unsettled jargons of the Esquimaux and the South Seas? And the reflection arises that this is the work, not of sovereigns, not of parliaments, not of general councils, not of synods, but of the combined action of Protestant Churches, obeying the first principle of the religion which they profess.

What advantage, it may now be asked, is there from such Congresses? Much, we answer, every way. Nobody, we flatter ourselves, will rise from the careful reading of this imperfect narrative, without a feeling of how circumscribed the field of his own knowledge is, how vast the subject, how short the life of man. To many a man of those who were present, it will be looked back to as the date of a new life: he heard many words, which he will not readily forget: he exchanged words with men, whom it was an honour to know: he had ideas forced upon him, which, though he cannot accept, he cannot hastily thrust aside, and which will be the keystone of his reading for many a year. These remarks apply to scholars, who have, as it is were, graduated in the science of language: but to those who are still outside, perhaps from this Congress may be dated their first glimmering notion as to what was the meaning of Aryan and Hamitic. Upon them the words of Max Müller must have fallen like the light of a torch, and of Professor Owen like a revelation.

It is idle to deny that there were serious drawbacks. There were some irrepressible speakers, who were never tired of hearing their own voices, and had no sympathy with the audience on that matter: they might have been gently repressed. There were others, whose voices were never heard, though greatly desired: they might have been called upon in a complimentary manner. There were many papers too long: on such occasions there should be an absolute rule of time by an hour-glass without any relaxation, except the acclamation of the audience; there were some papers wholly unsuited for the occasion, learned and abstract discussion of minutiae, interesting at the best to but a limited number of scholars. The Council should have declined to accept such, and used a wise discretion:

There was, as repeatedly remarked, no attempt by the simple machinery of an interpreter to bring the different nationalities into *rapprochement* with each other. The President of the section should at least have spoken two languages, and a selected friend should have been by his side for the third: the speech and the paper being limited in length, a few pointed sentences would give the purport of it sufficient for the moment. Much might be done by a wider and easier circulation of programmes of the papers to be read, or affixing notice of the business of the day on the screen. It was a perfect shame to talk about any section discussing anything: the inordinate length of the address, entirely unintelligible to many, partially so to many more, swallowed up the greater portion of the time: in these two particulars there was an entire miscarriage of the work of the Congress.

Still greater was the miscarriage as regards the "locality" of the Congress; and the Council are more to be blamed, as they erred in spite of knowledge and of opportunity. By a fortunate coincidence they had the theatre of the Royal Institution for their meetings, and the rooms of the Royal Asiatic Society next door for their office, place of rendezvous, and centre of information, where their Secretary should have been seated "*en permanence*" during the whole to answer questions and receive and make communications to the numerous strangers in this large city. The Council were entirely and completely wanting in this particular: from a fancied compliment to members of their own body, they tried to crush one section into a small library in St. Martin's Lane: they stifled another in a back room in Conduit Street: they carried off a third section to the uncomfortable theatre at King's College, more adapted for under-graduates than for ladies and gentlemen. There was no opportunity of getting information; and the inconvenience to foreigners, which was inseparable from a large city such as London, was magnified

by the dispersion of the sections, and the absence of any managing body.

Still it was a great success; and the foreign members dispersed to their homes, feeling that it was so. The *Times*, and other journals, felt that it was so also; that the subject was one deserving of a Congress, and that a Congress had been held worthy of the subject. We subjoin an extract from the leader of the *Times* with reference to our concluding remarks:—

“The members of the Congress of Orientalists are properly welcomed in the city of London because England, with its widening circle of responsibilities in the East, can afford to neglect no source of influence, no note of warning. The history, the literature, the archæology, the jurisprudence, and the philosophy of the Eastern nations have for the scholars of the Continent a speculative attraction; for Englishmen, and even for those who are not scholars, they have a direct practical interest, because the more we know of Eastern methods of thinking and lines of character the less likely shall we be to make mistakes in dealing with our Indian subjects and their neighbours.”

“It is only by the prosecution of such researches that the most perplexing and, at the same time, most interesting problems of modern criticism can be solved, and a generous recognition is due to the patience and devotion with which Oriental scholars have worked their way through incredible difficulties to our present knowledge. From mere fragments of literature they have deciphered no fewer than five languages—Persian, Median, Babylonian, and two sorts of Assyrian; and it will not be long before the key of the whole past is in our hands.”

“The Orientalists just now are filling a large space in our sphere of vision, and even from a more distant point of view they will really have a great deal to show as proof that they have not been idle. But we must remember, too, that such results as they can give us are, after all a very small part of the scientific material which the world has at its command, and, though it would be unsafe to neglect them, it would be far more unsafe to rely upon them too exclusively. Nor have we any right to demand that those who are engaged in digging the metal from the mine should also fashion it for use. The use will assuredly come later; indeed, in some part it has come already. Scholars have employed the results of Oriental research with splendid effect to explain and illustrate the nature of the slow evolution of legal and philosophical conceptions. Our Oriental scholars have enabled us also to correct some old philological mistakes, and we shall not be able in future to think that Latin is derived from Greek or Greek from Latin, since we have now learnt that they are really sister-languages and of the same family as the Sanskrit.”

The remarks which we would make in closing, are adapted to the Oriental scholars and to the English Universities. Scholars should bear in mind, that though it is necessary to respect the field of study in order to secure accuracy of knowledge, yet that one particular branch of the subject is only a part of the great whole, and that the study of language, as a whole, and of archæology, are but means to an end, are but steps in the great study of the human mind in all its developments. Some scholars forget their position, and to use a simile, devote their minds to the

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making of *bricks* instead of erecting *buildings*. It is perhaps the German school which errs most on this pedantic side, and trifles about the "minutiæ of philology, the "anise and cummin" of language. Accurate and sound scholarship may be bought at too dear a price, if the scholar forgets that all his knowledge is but relative and tributary. The Aryan schools have also made too much of their discoveries, forgetting that there are higher laws, which must be evoked, than that of Grimm, and a wider arena of comparative knowledge than the limited one of the Indo-Germanic family.

And to the English Universities, now on their trial, we would suggest that it is a great and crying disgrace, that in so great a tournament of philological science they should have been unrepresented: if any of their members came, they came as individuals only to repeat the old story, that no languages but our dear old friends, Latin and Greek, had any value on the Isis and the Cam. Out of their princely revenues, their scores of fellowships, their plurality of professional chairs, how inadequate, how ill-applied the provision for any one of the languages represented at this Congress? At every German University there are Semitic and Aryan chairs filled by men of European reputation, and a gathering of German and foreign students; and the Oriental languages, ancient and modern, have taken their places by the side of their occidental sisters. It is the same spirit which resisted Dean Colet and Erasmus in the instruction of Greek, which opposes the establishment of Oriental chairs and the widening of the field of instruction up to the requirements of modern knowledge. The Royal Asiatic Society has, during the last year, memorialised the University of Oxford, praying for the endowment out of their ample funds of a Semitic chair at that University: but nothing will be done while Dr. Pusey lives, who has narrowed the study of Hebrew down to the limits of Biblical exegesis, while Arabic is neglected, and Syriac altogether left out of notice. A return of the princely revenues set apart for purposes of education and study, has lately been made to Parliament; and we may hope ere long to see chairs established in every branch of the Aryan, Semitic, Turanian, and Pseudo-Turanian families.

ART. III.—RURAL MADRAS.

IN spite of all the changes that have passed over this land, the Indian village remains the same as it was hundreds of years ago. Army after army swept over the country; but as soon as one had passed by, the ryot began to cultivate his fields again as if nothing had happened. The Government has been changed times without number, but the government of the village has remained the same in all ages—a republic that Plato might have envied. It has had its headman and his subordinates, each knowing and doing his proper work from the time villages were first formed. The Indian village must at first have struck its roots deep into the ground, or it never could have maintained itself to the present time. The fiery Muhammadan was as different from the Hindu, as it was possible to be, but the latter settled down under the rule of the former, and cultivated his fields, and married, and gave in marriage just the same as if one of his own people ruled over him, and he paid his rent to the stranger, if not with alacrity, with that stolidness for which he is noted.

The village system has been the saving of India, while at the same time it has prevented its people from becoming a nation. The village is all powerful—a perfect model—but we might as well try to make a rope of mud, as to join the villages of India together. Every village has always been a small kingdom with its nominal head, the “Great Mogul,” the Kumpani, or the Queen; with a ruler who was better known, the Governor of the province, or better still, the Collector of the district; but the real head lived in the village and was to its inhabitants a substance, not a shadow. India can never be viewed as a whole, but as a number of particles, not forming a homogeneity in anything like a political sense. It may be that the present Government will mould the whole into one mass; but it does not now appear that such a result is at all likely, at least, not for a long time to come. As the system held its own, while the iron rule of the Musalmán was in force, it seems likely to do the same under the more tolerant and civilising government of the British. As an instance of the hold that the village has on the people, we may instance the fact, that when a man removes to a town and lives in it for half a century, he still looks upon the village from which he came as his home; and his children after him tell you that they belong to such a village, and not to the town in which they are living.

In whatever part of the Presidency we may travel, the villages present much the same appearance. They are, it is true, better

built in those parts where the inhabitants are doing well than in those districts where the ryot can hardly raise produce enough from the land to pay the *kist* to Government and keep himself and his family alive. In the deltas of the Godavery and the Kistna, and in the rich district of Tanjore, the houses of the ryots are generally built of brick, and tiled. But the general characteristic is the same as that of their poorer brethren in Bellary or Nellore.

The first thing that would strike a stranger to India on coming near a village, would be the great amount of waste land that lies around; and he would naturally ask where the land was that the ryots cultivated. He would be told in reply that it lay at a distance from the homes of the ryots. The village lies in the midst of a grove like an oasis in the midst of uncultivated land. An average Indian village consists of one main street—if street it may be called—where the caste-people reside, and outside the place may be seen the huts of the out-castes—the pariahs and the shoemakers. An Indian village—or at least, a Madras village—is not built with an eye to symmetry. The houses are not arranged in rows, but are pitched here and there, just as the builders thought fit. To see a Madras village at its best, one must enter it about seven o'clock in the morning. Then the ryot has not yet left for the field, but is looking after his work at home or else is gossiping with his neighbours. The Komatie (trader) is beginning to open his little shop, and the Brahmin is returning from his morning bath and his devotions in his favourite tank; while the women are busy ornamenting the thresholds of their houses with liquid chunam. They make an attempt to draw flowers and animals, and although they generally lamentably fail, sometimes something like a drawing is made which shows that if the designer had been properly trained, she might have turned out a fair artist. The way in which they do this ornamentation is very peculiar; they put the liquid chunam in their hands and placing the palm upwards, let it trickle between their fingers. The walking almanac is an institution, I believe, peculiar to this part of India. This man, who is always a Brahmin, goes round to the houses of the well-to-do inhabitants, and tells them the day of the month, the age of the moon, and any phenomenon that is likely to occur during the day. Then the butter-milk seller goes up and down the road crying out what she has to sell, and we may remark, that she is quite an institution in Southern India. The Government officials march about the place with all the majesty, and with more than the pride, of a Viceroy; and there is for a time a general stir in the little world, and work and gossip are carried on by turns. Soon after this the ryots leave for the fields, and the village settles down into its daily routine

of dulness. Often the only sound that can be heard is that of a woman calling out to a neighbour in the peculiar shrill voice of females of the East, or the bark of a dog, and then the silence reigns supreme.

The house of the ryot is not the most comfortable abode that might be found. We will take the dwelling of a well-to-do member of this class, and see what it is like. The dwelling itself generally stands a little way back from the road, though there is a wall, generally made of mud, that separates the compound from the road. By the side of this wall there is a mud or chunam pial erected on which the ryot sits and chats with his neighbours after the labour of the day is over, in the undress peculiar to the natives of this country. In the wall a door is placed for ingress and egress, and in many cases the cattle also find lodgings within the compound. If the ryot is well to do, he leaves a large space between the front wall and his house, and in this space, he keeps his cattle and his agricultural implements. The house of the ryot presents a blank wall in front—a common feature in Hindu architecture—and behind the wall, the dwelling begins. The house is invariably quadrangular, the court-yard in the centre being always open to the air, and the rooms are arranged all round. In some cases the rooms are separate huts, but, as a rule, they are connected; and on the side nearest to the street a slight verandah is built under which the males of the family often sleep. The principal room, which is generally in the right hand corner, is used by the head of the family, and the rest occupy the other portions of the house. The most sacred room of all in the eyes of a caste Hindu, the cook-room, is at the back, far from the gaze of those who may be of a different caste from the occupant. The rooms are small and dark, having no windows, and the only mode of ventilation is the door. In the sleeping apartments there is sometimes a cot, but it is generally of the rudest description, and where it is not to be found, the family sleeps on mats. In the verandah is always the rice-pounder, a stone mortar in which the grain is shelled with a heavy club with a ring of iron at one end. The pounding is always performed by women, and it is suprising with what facility they throw up the heavy club, and before it has fallen to the bottom make it rise again. To a European the work would be less interesting than working on the tread-mill, but the native takes to it with a good will, and goes on chatting all the time. The compound is any thing but a picture of neatness, for straw stacks, buffaloes, bullocks, and all sorts of odds and ends lie about on every side.

The ryot takes his first meal, which consists of boiled rice and butter-milk, early in the morning, before he goes to his work. He sets out for the fields with his plough over his shoulder, and

driving his bullocks before him at about half-past seven in the morning, the cows having been let out to graze a little earlier. Arrived at the fields, he begins to scratch the land, for it cannot be called ploughing, and the work is continued till about eleven o'clock, when he leaves off for a time in order to take his mid-day meal, which is generally brought to him by one of the females of the family. After a rest, and a siesta, work is resumed, and continues till about four in the afternoon, when he returns to the village. The females of the house have, during the meantime, been pounding the rice and doing the usual household work, the young married women being made to do the greater part. But when the ryot reaches home his work is not yet finished. There is a good deal to be done about the house, and this is the time for it to be done. At about five his labours cease, and he is at liberty to enjoy himself, if it is in the nature of the Madras ryot to do so. When it is cool, he either visits his friends, or they come to see him, and the business and scandal of the little community are freely talked about, and the merits of the officials are freely canvassed. If the Collectors and their Assistants could only hear the criticisms that are made on these occasions, they might, if they were so inclined, gain a great deal of information that would be useful to them. Reasons are given for measures by Government that the framers would never have dreamt of, and the most curious tales that are circulated are the most believed. The ryot takes his evening meal between eight and nine o'clock, which is brought to him by the females of his family, and they wait on him and on the other males till it is over, and then take their own. One day with the ryot is just like another, except at the feasts and the marriages in his family.

The chief event in the life of a ryot is a marriage. We will suppose that his son has arrived at the mature age, say eight or ten, and in a solemn conclave the family have decided that he ought to be united to some member of the opposite sex. The female members have fixed on the identical young lady that they wish to secure as the wife of the future head of the house, but a great amount of diplomacy is required before the matter can be concluded. The village barber is taken into confidence, and he throws out hints to the parents of the young lady, who may be of the mature age of five years, that matters must be brought to a crisis. So the father of the young gentleman goes over to the house of the bride elect, and for the first time or two there is nothing said on the subject on which both are thinking most intently. The scene in "Little Dorrit," in which the difficulty of bringing Lord Decimus Tite Barnacle and Mr. Muddle together is depicted, illustrates the state of mind of these two men exactly; but at last they come to terms. The father of the young lady is willing to

deliver her up to the father of the young gentleman if he will give her a certain sum of money and a certain number of jewels. The bargaining takes a long time, but at last the negotiators come to a conclusion, and the day is fixed for the wedding. The sinews of war have to be provided, and ryots often involve themselves for life on these occasions. First, friends are asked to contribute, and they generally do help, but it is the *soucar* who is called in and who has to provide the greater part of the needful. Of this gentleman more will be said presently. A large *pandal* is erected in front of the house, and the people of the same caste are invited to feast themselves to their hearts' content, while the native musicians send out the most horrible sounds the whole time. The Brahmins have presents of rice given to them, and to near relatives cloths have to be presented. On certain days the poor young people are carried round the village in a kind of open palanquin, and sitting opposite to each other they hang down their heads and look as sheepish and miserable as it is possible to look. Poor little things! they are objects of pity, for they are kept up to a frightful pitch of excitement for a number of days, and the after-depression must be terrible. But it gives them delight, and the old people live over again in the enjoyment of their children and grandchildren. The money that is given to the priest who performs the ceremony is not small, and the sums spent in other ways are very large. The ryot and his family have to put up with many a light meal on account of the few days' revelling.

The ryot has his feasts at which he enjoys himself in his own way, and now and then he visits a holy place to perform a vow that he has made in the time of trouble. On these pilgrimages he generally takes a number of the females of his family, and shut up as they are during the whole year, they heartily enjoy the trip. In fact, it is generally thought that it is the women who keep up the pilgrimages.

But pilgrimages bring us to the subject of religion. The ryot, though not a religious man, is most certainly a most superstitious one. He believes something, though he would find it hard to say what that something is. He performs a number of ceremonies regularly, and observes the feasts, but he looks upon everything much in the same light as the peasants of Spain and Italy look upon their festivals. After a fashion, the ryot is generally a Sivaite, and wears the horizontal mark on his forehead, which he religiously puts on just after taking his mid-day meal. He believes, as far as can be made out, that there are certain powers that he ought to propitiate. He has, therefore, Siva, the destroyer, as his deity, and next to him he prefers Râma, about whom and his wife Sita he has picked up some most

wonderful tales, which do not decrease in their marvellousness by being again repeated by him.

In most cases, however, the ryot, although professing to be a follower of Siva, really devotes his worship to the village god or goddess. The temple is placed generally outside the village, and here, at certain times, the whole of the caste-people of the place join together to worship, and the distinctions of rank are forgotten. The noise and confusion at the village feasts are tremendous. There the ryots muster with their families, and in their way they enjoy themselves thoroughly, though to the European it is hard to discover in what the pleasure consists.

But the tendency of Hinduism in this part of India is towards disintegration, and the ryot seeks something smaller than the village pagoda, and something more belonging to himself. So he sets up a small temple of his own, of the rudest description, in which—or rather before which—for it is generally too small to enter, he offers up something to propitiate the evil deities in whom he so thoroughly believes. Some ryots will have two or three of these shrines, and some of them have one in almost every field. These rural temples are generally built of clay, and before them the worshippers offer up fruit or sugarcane to propitiate some deity or other that they think is likely to trouble them. The ryot has a number of gods and goddesses, generally the latter, to trouble him, and to destroy his crops and his cattle, or to give disease to himself or to his family. These must be propitiated, and for some a cocoanut and a small quantity of sugar are sufficient, while others require more costly offering. Even the snakes in many parts of the Presidency come in for a large share of worship, and more than their share of offerings. By some train of reasoning, the people make these reptiles into gods, and the more dangerous a snake is the greater is his rank in the order of godship and the more disinclined are the people to kill it. The ryot divides the large gods into small ones, and the small into smaller, and still his division does not end here, for like Goldsmith's schoolmaster he goes on dividing still. A writer in a native journal described the deities of the country as "gods, sub-gods, and sub-assistant-gods," and he was not very far wrong. When the villager performs his devotions he does not spend too much time over them. His prayers are short, but I cannot say whether they are to the point.

I have still to speak of the ryot in one relation, and that is in connection with the Government. In this Presidency four-fifths of the land is held directly from the State, and not through the zemindar. I will not frighten the readers of this *Review* by going into all the different kinds of land-tenures that are in existence

in this part of the country, neither shall I mention all the technical terms that are used. I shall satisfy myself by giving an account of the ryot who holds land direct from the State. It has only just been discovered by this individual, that he is not under the rule of the "Kumpani," but he does not quite comprehend yet under whose rule he is. He has a vague idea of a sovereign who lives far away, but where, is quite beyond his comprehension. The Queen is to him an abstraction, the Collector and his officials are realities. The ryot, we will suppose, lives on the land that his forefathers lived on for years past, and which he cultivates for the most part by means of his own family, only calling in labourers at the time of planting and reaping. Year after year he sows his rice, and plants it out on the same land, and the rent does not vary except in those years when the crops fail or are unusually good. The rent is paid in twice a year, and the money has to go through a number of hands before it reaches the Collector's cutcherry. In the first place there is the Kurnam, who has to write out the accounts, and the village Munsiff, who has to render an account of everything that is going on in the village. These two men are at the bottom rung of the official ladder, of which the Collector forms the top. The Kurman has not only to keep the accounts, but he has also to take charge of the rent, and after showing it to the village shroff, who examines it, he delivers it to the tehsildar of the talook. This is the general order of things, but in some districts the money is paid directly into the talook cutcherry, and not through the village officials, but this is not often the case. From the small cutcherry the money is passed on to the Collector's at head-quarters, there to go towards the expenses of the State. The time of paying the rent is one of weeping and wailing to the ryot. If his crops have not been so good as usual, he is hard pressed to pay the money, and if they have been good, he is anxious to keep as much of the money that he sold the grain for, as he can. Take Cowper's short poem on the "Tithe day," and put the village official in the place of the parson, and Ramaswamy instead of the English farmer, and you have some faint idea, though very faint, of a Hindu rent day. The ryot swears by all his gods that his crops have failed, and that he has no money to pay the rent with. It is all to no purpose. He is not argued with, but a knowing peon walks up to him and quietly drags the right sum of money to light from a small bundle in the end of his waist-cloth. Ramaswamy is not in the least disconcerted by this manœuvre, and only gives a grim smile, as much as to say, that the powers have been too much for him. He is, however, never discouraged, but tries the same thing over and over again. A short account of the *ryotwaree* system may be interesting :—

"The land is divided nearly everywhere into fields, and the tax on each field is fixed. During a stated period of each year cultivators may either obtain more fields, or give up any of those which they have. Remissions of the tax are granted in special cases, as for instance when there is a failure of irrigation from a supply of water, assumed to be sufficient when the tax was fixed. Charges are made in addition to the field-tax when water is supplied to irrigate a second crop in the same year on land taxed as growing only one crop, or when water is supplied to land which is taxed as not being so supplied.

"There is an annual settlement (*jummabundy*) at which are recorded alterations in the land held by each proprietor who has increased or diminished his property, remissions of taxes granted under the rules, and charges made in addition to the field-tax for irrigation.

"This system, which is known as the *ryotwaree* system, is the most familiar to the people, and it creates an elastic revenue which increases as increasing population and prosperity cause more land to be reclaimed and cultivated.

"The amount of revenue due under this system in the year beginning on the 1st July 1871 and ending on the 30th June 1872, was £3,631,407. Ten years before in 1861-62, it was £3,417,926. The expansion has been regular from year to year.

"It has been observed that the State has a right to fix the land-tax at its discretion, but in accordance with certain principles. In cases where Government deals direct with the ryots it is held that the tax can be altered from time to time, and (with a few exceptions) that its proper amount is half the value of the net produce of the land after the expenses of cultivation have been deducted from the gross produce. At the commencement of the British rule, the tax was determined in a rough and ready manner, which left many anomalies and inequalities to be afterwards rectified. The worst of these have been mended from time to time, and now there is a Survey Department which determines the exact area of villages and sub-divisions of villages (*Kandams*), and fields, and a Settlement Department which calculates the rate of assessment, or in other words, the tax which should be paid for each in accordance with the 'half-net' principle. The assessments thus revised are to be in force for thirty years. In the Godavery, Kistna, and part of Kurnool, an important deviation has been allowed from the 'half-net' principal in the case of land irrigated by channels led from the great anicuts across the Godavery, Kistna, and Tungabudra. The land-tax has been calculated as if the land were not irrigated, and the irrigation is charged for at a uniform rate per acre."

The produce of the land is the great topic of conversation in an Indian village throughout the year, and more especially about harvest time, for not only do the cultivators live by the produce of the soil, but there are a number of other people who receive their fees in part in grain, and consequently they are anxious that the crops should be good ones. These men are the priests who have a share for leading the devotion of the flock throughout the year, and the village schoolmaster, who teaches the children, and the barber, who polishes the chins and heads of the villagers, and the astrologer, who tells them what is to happen. The share of grain that these men receive at each house is small, but the aggregate is generally not to be despised. The squabbling over the division is terrible to contemplate; the ryot tries to cheat, and the receiver tries to get more than he has any right to, but generally they split the difference and hit upon the right quantity. The labourers in many districts are paid in kind and the quantity that they receive is not large, and when the harvest is over they are turned adrift to shift for themselves. The principle on which the ryots deal with their workmen is "heads I win, tails you lose," and the principle is anything but a good one so far as the labourer is concerned.

There is one character in the village whom we must not omit to mention, and that is the money-lender. This man plays a very important part in the economy of India, far more important than most people are apt to imagine. He shares the money gained from the produce of the land with the Government, and his share is generally a very large one. He is the great evil, though, at the same time, the great necessity of the village. This man is generally a Komatie and sometimes holds some petty post in the place. When a villager is in an impecunious state he betakes himself to this gentleman, and the work of getting money from him is very difficult. The work resembles a regular siege. Lines have to be opened and works erected, and every available force has to be brought to bear upon the fortress. At last the money-lender gives in and consents to lend money, but at a most exorbitant rate of interest. Nominally, it may be only twenty-four or thirty per cent. per annum, but in reality it is seventy-five or even one hundred. This is brought about by the way in which the interest is made up. It is reckoned on the whole sum for the whole time that the money has to be re-paid. For instance, suppose a ryot wishes to borrow one hundred rupees, to be re-paid by monthly instalments of Rs. 10, interest being at the rate of three per cent. per mensem or thirty-six per cent. per annum. In ten months the money would have to be paid back; the interest is reckoned on the whole sum for that time and it amounts to Rs. 30. This is deducted from the principal and the balance, Rs. 70, minus

the fee of the man who writes the bond, and the value of the stamp is put into the hands of the borrower. The instance I have given is one in which the borrower gets an easy bargain. But the ryot often fails to pay and then the soucar has him at his mercy, and the power he possesses he uses most unmercifully. He threatens to take the man before the Munsiff's Court, and if possible, he pronounces this threat just at the busiest time of the year, when it would be ruin, or next to it, to the ryot to dance attendance at the court, for such suits are not decided in a hurry in the Mofussil. Rather than submit to this, the ryot will agree to anything that the *soucar* tells him, and so it often happens that a small debt in the beginning is swelled into a very large one by continual renewals, and is in the end perhaps paid half-a-dozen times over. Many debts are handed down from father to son with the land, and every year, instead of getting smaller, they become larger and larger, for the *soucar* manages in some way or other to add something to the account. The ryot is, it must be acknowledged, a thriftless being, but one cannot much wonder at this, when we consider the load of debt by which he is pressed down, and has always to carry about with him as long as he lives. Debt to him is the "Old Man of the Sea;" and do what he will, he cannot get free from its power. On one side there is cunning and knowledge backed by law, and on the other is ignorance and fear. It is no wonder that the ryots are so miserably poor. It has been recommended that the Government should open a bank to lend money to the ryots on the security of their crops. If something of the kind could be done, it would do more good for the ryot than almost anything else. With a terrible load of debt upon him, all life and energy are crushed out of him. With a bank where he could borrow money and pay off his debts and begin life again, and with an education of some kind, the cultivator would be a different kind of being from what he is at present, and from what he is ever likely to be under the present order of things. The indebtedness of the owners of the land must soon be looked upon as the great problem of the day, and if our rulers wish to prevent the pauperisation of the ryots, steps should be taken at once to bring about a change. The Government and the laws are now playing into the hands of the money-lenders, and one is almost led to ask, on reading the Civil Procedure Code, whether some of these men were not called in to assist in its construction; so much does it favour their designs. Our Mofussil courts are demoralising and impoverishing the many for the sake of a few, and those few forming a class of men who pay little or nothing towards the expenses of the State.

There is another institution in this Presidency that is, I am sorry to find increasing in popularity, and that is the toddy-shop.

The Abkari system of Government appears to be training the people for drunkenness ; for, according to the last Administration Report of the Presidency, the duty, or in other words, the money paid for the permission to drink, amounted to nearly one-seventh of the whole land revenue. This fact shows that the people have got over their prejudices about drinking, and that they are very little behind the rest of the world in the matter of toping. It must be borne in mind that the large sum of money that is paid in this way, as I have said, is only for permission to drink, and not for the drink itself, so that the money paid for allaying the thirst of the people in this part of India must amount to nearly as much as the money paid for the land held by the cultivators. The toddy-shop is not a picturesque-looking place, and mine host does not try to set off his inn to the best advantage. It is generally a small building with a sign board placed over it, on which, we are told, that "Ramaswamy is licensed to sell toddy and arrack" to all who feel inclined to buy. A good many people think that some change ought to be made in the Abkari rules, and that if some necessary changes were made, the amount of drinking would be greatly reduced. I doubt this very much, for the people having once acquired a taste for drinking, will not very soon give it up. Some have advocated the increase of the duty on liquor, but if this were done, the people would have to spend more money than they do now, for as I have just said they are not likely to deny the pleasure of drinking. The Government might be more careful in granting licenses, for some of the toddy-shopkeepers are anything but good characters.

I must reserve what I have to say on the subject for a future article. The village population of Madras is a topic wide enough for many articles. There is a superabundance of material rather than a lack of it.

F. GOODALL.

ART. IV.—THE ELEMENTS OF THE PSYCHOLOGY OF COGNITION.

BY ROBERT JARDINE, B.D., D.Sc.

PHILOSOPHY, as its history testifies, has passed through varied and apparently successive conditions of good and ill-fortune. Although at no period since the dawn of philosophic enquiry has the pursuit of this interesting and important study suffered a total eclipse, it has had its seasons of partial obscuration followed by seasons of re-illumination. Compared, for instance, with the neglect, not altogether unmixed with contempt, with which the subject was treated in Great Britain at the end of the last or at the commencement of the present century, metaphysics may be said now to be popular among the thinkers of the day, and to be attracting an unusual degree of attention. The number of books, certainly of very varied merit, treating of philosophical questions, and proceeding from different and rival schools of thought—some of them coming from men who are distinguished as students of Physical Science—which is annually published in England, is a satisfactory and encouraging indication of the keen interest which this subject now possesses and exerts. Sir William Hamilton in his *Discussions* signalizes the abject condition to which one branch of Philosophy—Logic—had fallen in the Universities of Oxford and Scotland, both of which were reputed to be nurseries of philosophical erudition, and possessed special endowments and means for promoting it. The first indication of this revival and one efficient agent in furthering it was the publication of Dr. Whately's *Treatise on Logic*. This Essay, as Sir William Hamilton elaborately and somewhat ruthlessly points out, is not free from inaccuracy as regards the history of logic, and is, moreover, encumbered with matter not falling strictly within its own province. But, in spite of his learned criticisms, it may be safely asserted that the book, besides being a very meritorious production, considering the then almost moribund condition of logical study at Oxford, and a very useful manual of the science at the present time, did immense service in awakening attention and stimulating enquiry. But the measure of severe and unsparing criticism which Sir William Hamilton dealt to his immediate predecessors has been meted out to his own philosophical speculations. Mr. J. S. Mill in his *Autobiography* expresses his great sense of disappointment when he began to examine minutely the views on mental philosophy and logic which Sir William Hamilton had propounded; and unquestionably he has succeeded in detecting, and, in his *Examination*, brought into clear light, sundry slips and

inconsistencies, not to say glaring mistakes, in the various theories to which the Scotch philosopher has given his deliberate sanction, and in those particular dogmas which are more especially associated with his name. Whatever be the ultimate issue as regards the establishment of that system of philosophical opinions which Sir William Hamilton inculcated, and with such profound learning illustrated and confirmed, (some of his doctrines highly esteemed by himself are rejected by all philosophers, his own disciples included,) yet it will scarcely be doubted, that among all those leaders of thought who have exercised a quickening and moulding influence upon the course of philosophic speculation in the present generation, the foremost place must be assigned to Sir William Hamilton.

In this general revival of the study of philosophy, it is scarcely a matter of remark that the inherent importance of mental science and its great value as a disciplinary education of the intellectual powers should from the first have been recognized by the Governing Body of the Calcutta University. The subject has always been an integral element of the Higher Examinations. But, as in all similar institutions, the text-books have been changed from time to time. Works which were supposed to have become antiquated, or to be scarcely abreast of modern enquiry or knowledge, or not sufficiently scientific in their method of treatment, have been replaced by others deemed more suitable. Bearing in mind the irreconcilable differences which exist with regard to some of the fundamental questions with which philosophy is conversant, it could not be expected that, however carefully the text-book might be selected, it would secure the suffrages of all parties. Yet, in spite of this radical disagreement of opinion and of the apparent impossibility of the subject being eclectically handled, there has been a pretty general concord among those who have interest and experience in the education of this country, that philosophy ought to be comprised in the subjects of at least the examinations for degrees. For many years, Dr. Abercrombie's elementary *Treatise on the Intellectual Powers* was the sole text-book for the Intermediate or First Arts Examination; but, very early, murmurs of dissatisfaction were heard, and after some agitation and full discussion, the University sanctioned, as an alternative, Dr. Reid's "*Inquiry into the Human Mind.*" There could not be much difference of opinion as to the inadequacy and faultiness of Dr. Abercrombie's work, regarded as a scientific treatise on psychology. But this, though a point of first importance, was not the only one to which, in making choice of a suitable text-book for the First Arts Examination, attention had to be directed. It being apparently assumed that mental science in some form or other must be a constituent part of this University Examination, it is obvious that the conditions of choice

became somewhat peculiar and difficult of fulfilment. That the selection of a suitable text-book for this examination was beset with difficulties is, we think, clear from the fact of Dr. Reid's *Enquiry* having been ultimately chosen as an alternative. This treatise is the earliest of that philosopher's productions, and exhibits his speculations in their immature and undeveloped form. It is marked by much vigorous writing and forcible, though often inapposite, illustration. His appreciation of the theories he attempts to combat was not always accurate, and consequently his attempted refutations, being directed to the wrong points, are often useless. But the submission of evidence in proof of the defectiveness and insufficiency of Dr. Reid's *Enquiry* as a text-book of psychology is superfluous. The fact is universally admitted. What is needed is a work which has some pretensions to scientific accuracy, which embodies the results of modern research, which illustrates and applies modern analytic methods of investigation, and yet is so simple in style, so elementary in matter, that it will not be beyond the mental grasp of University students who are preparing for the Intermediate Examination. The combination of these somewhat conflicting conditions presents a great, and, many are disposed to think, an insurmountable difficulty. When fairly realized, it will go far to account for the fact that the University, although numerous works on psychology have been published within the last ten or fifteen years, had, after casting about for a suitable text-book, to adopt Dr. Reid's *Enquiry*, which was published so long ago as A.D. 1797.

The Rev. Dr. Jardine, Principal of the General Assembly's Institution in Calcutta, as a learned student of philosophy and as an experienced teacher of it, has long and painfully realized the unsatisfactoriness of Dr. Abercrombie's and Dr. Reid's Treatises as text-books on Psychology, and, not finding any existent work that would exactly meet the requirements of the case, has prepared one himself.

"*The Elements of the Psychology of Cognition*" does not profess, as the author modestly alleges, to be more than an introduction to the science, but, though written under pressure of limited time, embodies the results of several years careful thinking on the subject, and practical experience as a teacher of it. Indications of the haste with which finally the treatise was written may be detected here and there, and these, under the circumstances of its publication, may be easily excused. Putting aside these minor blemishes, Dr. Jardine's treatise is an excellent work, simple and lucid in its style, logically methodical in its arrangement, and exhibiting, without any display, almost on every page, accurate learning and clear vigorous thought.

The author, when proposing to the Syndicate of the Calcutta

University to prepare this treatise, characterised, with unadorned plainness of language, the faults and defects of the present text-books; and it cannot be denied that in this work he has to the full redeemed the pledge, which by making these charges he impliedly gave, *viz.*, that his projected treatise, which he hoped, would be substituted in their place, should not be amenable to such accusations. It would be a procedure like damning with faint praise to assert that the description which he gives of Dr. Abercrombie's work does not apply to the "*Psychology of Cognition.*" "Abercrombie's work on the mental and moral powers is so exceedingly faulty and defective, that it is a disgrace to any University to have it upon the list of its text-books. The compiler of it shows a gross ignorance of well-known philosophical theories; his book contains none of the more recent results of enquiry; many of his illustrations are more fitted for the nursery than the college class-room." Nor is there any likelihood that the charges which he lays against Dr. Reid will be advanced against him. "Reid did not understand the theories of some of the philosophers whom he criticises. Consequently, in order that the subject may be taught, it is always necessary to point out Reid's errors, and any experienced teacher knows that this correction of the author's misunderstandings is the cause of great confusion in the student's mind. Reid's own doctrines are now antiquated and many of them erroneous; even those who study psychology from his stand-point have in very important respects modified his doctrines."* But, while the superiority of this treatise in scientific accuracy satisfies most completely one of the conditions of a suitable text-book on this subject for the First Arts Examination, there is room for doubt whether this very excellence has not precluded it, at least to a great extent, from satisfying the other condition of facility of comprehension. In simple justice to the author it must be admitted that the language of the treatise is as simple as possible, that the style is straightforward plain and clear, and that the imperative and difficult task of simplifying, without sacrifice of thoroughness and accurate research, what, in itself is necessarily an abstract dry and abstruse subject, has been fully realized and very successfully performed. But, whether it be from the creditable ambition of producing a worthy book, or whether it be that psychology altogether, treated in any scientific way in however simple style, does not fit the mental calibre of University students, in a comparatively early period of their education, there will be little doubt that the Professors of Philosophy in Government or other Colleges, will rise from the perusal of Dr. Jardine's treatise with

* Caloutta University Minutes, 1873-74, p. 101.

the conviction that he has succeeded, as he proposed, "in preparing a book which would be abreast of the present state of the science," but he has not been equally successful in making it "at the same time not too difficult for the student's *comprehension*."* Nothing we suppose, could be more remote from his intention, but we fear that, as matter of fact, he has put into the hands of those University reformers who advocate the excision of psychology, in any form or shape, from the scheme of the First Arts Examination, a very cogent argument in proof of the soundness of their views.

The treatise may be conveniently divided into three parts, which discuss, in synthetical order, the successive stages of development of the intellect, and the various modes in which our knowledge is acquired and elaborated. It thus contains an explanation of the elements and process of Perception, of the nature of Representation, including the association of ideas, memory and imagination, and of Thought Proper, that is, the elaboration of the materials gained by these introductory operations into general notions, judgments and inferences. The work is prefaced by an introductory chapter explaining the method of enquiry which must be followed and giving a critical estimate of the different values of the knowledge derivable from these available sources. To the exposition of his own theory of perception, the author has appended in a subsidiary chapter a valuable discriminative account of the different theories of perception which have been propounded by the principal and leading philosophers from the time of Des Cartes. After a brief luminous sketch of the two distinct stand-points from which the process of perception may be examined, the author proceeds to give a well-digested carefully and accurately estimated description of the salient features of the opinions of each philosopher mentioned. The chapter is a favourable specimen of the author's ability to seize the central and dominant characteristics of each system of opinion under review, and of exhibiting in logical and genetic sequence the various theories of perception which are developed from them. Where the whole is so good, it is not easy to single out any one portion, but attention may be drawn to the remarks on Hume's speculations, not only because his opinions on perception may be rightly said to constitute an epoch in the historical course of philosophical enquiry, but also because the author has introduced a method of illustrating the nature and possible solutions of philosophical problems, which, if not quite novel, is exceedingly rare in books of this character. He has devised an ingenious diagram in which the manifold factors, whose

* Calcutta University Minutes, 1873-74, p. 103.

various combinations have been conjectured to produce perception, are clearly exhibited in their relations to each other and to the complex result. The primary object of this ingenious diagram is to throw light upon the representative theory of perception in its various modifications, and with the author's lucid explanations it serves that purpose admirably. The toilsome journey which our University students have to make over the dreary waste of Sir William Hamilton's persistent attack upon what he designates the cosmothetic idealism of Dr. Brown, would be considerably lightened and materially shortened, if that eminent philosopher had condescended from the heights of professorial rhetoric, and had availed himself of some such effective expedient as this for illuminating the distinction between the "finer" and "cruder" forms of the representative hypothesis. But it appears to us that this ingenious diagram may be just as easily applied to illustrate other knotty points in psychological questions, and we are not sure at this moment that we shall not find it a very convenient engine of attack on some of the author's own theories with which we may not be so fortunate as to agree.

The *Psychology of the Phenomena of Cognition* professes to give a scientific analysis of knowledge into its ultimate elements, and an adequate explanation of its genesis and development. Of the three sources whence the materials for the achievement of this two-fold-purpose are derived,—the results of mental activity, physiology and consciousness,—the first may, as regards the purposes of this review, be passed over. However serviceable in illustrating the complexities of mental states in the higher departments of cognition, it is comparatively of small utility in the earlier stages of the enquiry. But the two latter claim a more detailed notice. There has been considerable difference of opinion as to the mutual relations of the sciences of physiology and psychology and as to the limits of their respective spheres. On one side, psychology is branded as an usurper, as putting forward pretensions, which are simply fictitious and visionary, to take rank as a science, while in truth all scientific knowledge of intellectual and moral phenomena is secured by physiological experiment and observation. It is the proper function of the brain, it is alleged, to produce mental phenomena as, for instance, it is the special function of the liver to secrete bile. On the other side, it has been no less confidently alleged that the mind and the body are two distinct independent substances mysteriously united in human nature, but the connection is only one of juxta-position, not of causality. It is idle, therefore, it is argued, to suppose that any light can be thrown upon the secrets of mental states and operations by any examination, however minute, of the machinery of the body. The author repudiates both these extreme and conflicting

hypotheses. The former is rejected for the obvious and conclusive reasons that mental and material phenomena are dissimilar in kind, and that while material phenomena are recognized by sense, mental are directly perceived by consciousness only. The scalpel of the anatomist and the microscope of the physiologist, or, indeed, any method of external observation, however complete and perfected, will not disclose the existence or give any information as to the nature, of a sensation or perception, or of any mental fact whatever. Therefore, although it is not pretended that an intimate acquaintance with the nervous system may not be helpful to the study of the mind in some subordinate degree, there seems to be little or no warrant for the assumed identity of the relation of the brain and mental phenomena, and those of physical organs and their functions. The author's remarks on the latter hypothesis show with what firm grasp he has seized the exact object-matter of psychological enquiry, and with what fairness he is prepared to appreciate any fact which has any material bearing upon the subject in hand. "In the first place, the student of psychology "has nothing to do with the so-called *substances* of mind or "matter; he has only to study the phenomena, the sensations and "qualities which consciousness and perception make known to him. "And, again, it is unscientific to advance to the study of the mind "with certain pre-formed and crude notions regarding its nature, "its independence of matter, and other things. As far as our "experience goes, the mind is most intimately connected with our "physical organism, and it appears to be the duty of the psy- "chologist to take into account every fact bearing upon his sub- "ject, admitted to exist, and learn as much from it as possible. "Moreover, it lies within his sphere to study only those pheno- "mena which manifest themselves in our present conditions of "existence, and not to speculate or make assertions regarding "what might be under other conditions."* It will not be questioned that we are not justified in assuming anything beforehand, as to the mode of connection of mental and material phenomena in the human organism, but it may be remarked further that, if there are facts which indicate that "brain-change" is the invariable physical antecedent of *some* mental action, we must be on our guard against unwarrantably extending this conclusion beyond the limits of the data upon which it is based. Unquestionably, the actions of the bodily organs and the operations of the mind have a causal relation to each other. The emotions have a powerful effect upon the organism, and may be regarded in what Mr. Bain calls their "physical side;" the energy in action of the mind is again dependent upon material con-

* p. 11.

ditions. These facts lie on the surface. But it is obviously illegitimate to infer that because some mental action may be allowed to be the result of the operation of the physiological mechanism, every mental phenomenon has a physical antecedent, and that all mental activity is virtually *automatic*. The most important and higher intellectual activities and the nobler emotions are, as far as we can observe, not preceded or conditioned by changes in the organism, and there does exist in the mind a self-activity and power of directing the thoughts and regulating the motive force of the feelings; and consequently till more evidence is exhibited than has as yet been adduced, we are justified in rejecting this materialistic hypothesis. "There is an entity wherein man's nobility essentially consists, which does not depend for its existence on any play of physical or vital forces, but which makes these forces subservient to its determinations."*

The study of consciousness will remain by far the chief and most fruitful method of acquiring psychological knowledge. It is the only method available for becoming directly acquainted with the object-matter of psychology. But the investigation of the contents of consciousness and the analysis of the facts of consciousness into their ultimate elements is an operation, interesting, no doubt, to persons of a metaphysical turn of mind, but of great delicacy and difficulty. Consciousness is the tribunal to which philosophers of all shades of opinion appeal for confirmation of their views; and its verdict, if it can only be ascertained in its uncontaminated originality, is universally admitted to be final on all questions coming within its jurisdiction.

"Psychology," says Sir William Hamilton, "is a developed consciousness. It is a scientific evolution of the facts of which consciousness is the revelation and guarantee." Mr. J. S. Mill, adopting simpler language, expresses precisely the same sentiment: "All theories of the human mind profess to be interpretations of consciousness: the conclusions of all of them are supposed to rest on that ultimate evidence, either immediately or remotely."† But, unfortunately, not only are there wide diversities of opinion as to what the sentence is which consciousness, when appealed to, pronounces, but also, in spite of this external agreement, we find when we descend to particulars, there is very far from being unanimity among philosophers as to what the court of consciousness is, and where it is to be found, to which the final appeal is to be made. Sir William Hamilton appeals with confidence to the verdict of consciousness as to the immediacy of a perception of material qualities, but Mr. J. S. Mill disputes the competency of *that* consciousness

* Carpenter's *Mental Physiology*, p. 27.

† Hamilton's *Discussions*, p. 86. Mill's *Examination*, p. 137.

to give any decision upon the question, and asserts that the matter in dispute could only be finally and satisfactorily decided by the testimony of the first consciousness in any infant, if, somehow, we could possess ourselves of it. Here, we see, there are different consciousnesses, and the authority of one of them is impugned. In truth, the word consciousness is used in a very wide range of meaning and in various applications. It is the most extensively used and the best abused term in the whole vocabulary of mental philosophy, and has been a source of endless confusion. Though it plays such an important part in the psychology of Sir William Hamilton, and he is reputed to be *facile princeps* as an expositor of consciousness, yet one of the not least successful chapters of Mr. Mill's elaborate examination is occupied in tracing out and bringing together the various and inconsistent explanations which that philosopher gives of consciousness. For instance, he shows that while engaged in vigorously exposing what he conceives to be an erroneous dogma of Dr. Reid, Sir William Hamilton, though quite at variance with his own matured and carefully expressed opinions in other parts of the same work, has extended the range of consciousness so as to include objects of the external world. Consciousness of a mental operation involves consciousness of the object of the operation, if we are conscious of a perception of the inkstand lying before us, our consciousness must comprehend within its sphere the object of the perception, *viz.*, the inkstand. Now this extension of the meaning of consciousness, viewed as a philosophical technical term, to cover the objects of *acquired* perceptions is a novelty, and though a far-fetched and fanciful vindication of such application is attempted by Sir William Hamilton, the success of the attempt is more than doubtful, and the application itself is quietly abandoned when he comes to expound his doctrine of perception of distant objects. Dr. Jardine certainly does not follow the eminent Scotch philosopher in this extension of the sphere of consciousness to external objects. In an early part of his work he provides us with a definition of this term which expressly disallows it. "Consciousness is the power which every individual possesses of becoming aware of the various feelings and other phenomena which are experienced in his mind."* In estimating the nature and value of the materials procurable by an examination of consciousness, the author passes some brief critical remarks on the difficulty and importance of mental analysis, but there is not given anywhere any explanation of consciousness in general. Now, within the limits of the definition of consciousness given, there are various questions of great importance, having a close bearing on some of the subjects handled in the following

chapters, which might, we think, with advantage have been discussed in this introductory portion of the work. Had the author devoted a brief introductory chapter to the exposition of consciousness in general, its different degrees of intensity, its varying range of application, its essential metaphysical elements, he would have materially assisted himself in his subsequent explication of particular modes of consciousness, and would have made it much easier for the junior student to comprehend the rather peculiar nature of mental analysis, and of the elements into which mental acts and states by that analysis are resolved. His statements on the exceeding delicacy and difficulty of reflective analysis, and yet its indispensableness in untwining the tangled tissue of psychical acts, are lucid and forcible; but there is no intimation given of a convenient and useful division of consciousness, into the ordinary consciousness, which is the universal endowment of the human race, and philosophical consciousness, that is, consciousness intensified by an act of will and directed inwards upon the manifestations of the mind itself, which is usually termed reflection. It is true the difference is one of degree only, and no clear line of demarcation can be drawn between them; yet the distinction between consciousness and reflection is well established and useful. Some allusion to this distinction is wanted to complete his remarks on mental analysis.

"As the chief object of psychology is to ascertain the simple
"and original elements of our complex mental phenomena, and
"the laws in accordance with which these elements combine
"and transform themselves into our matured mental activities,
"the first part of the method of psychology must be analytic.
"Our first endeavour must be to determine those mental actions
"which being of the simplest and most elementary kind, enter
"as constituent elements into the complex operations which
"consciousness reveals." After stating that the truth of the
system depends upon the thoroughness and accuracy of this
analysis, it is rather puzzling to read the following sentence: "The
analysis of mental phenomena cannot, as a rule, be effected by
simple introspection; and recourse must be had to a variety of
observations and experiments suggested to the psychologist by
the methods so successfully employed in physical science." If by
"simple" introspection is meant the mental analysis, the importance
of which he has been proving, then there is an inconsistency not
easily accounted for. If he means an otiose uncritical recognition
of mental states, then it is not only true, but something like a
truism, and we should expect that the remark was introduced to
set off in clearer light by the contrast, the nice discrimination
and earnest attention required in the exercise of the reflective
consciousness. But the remark leads to something very different.

We discern no justifying occasion for reference to the variety of observations and experiments of physical science in the tenor of the previous remarks, nor is any further light thrown upon the obscurity of the remark by any further explanation or illustration in this passage. It is only when we have read about twenty pages further on we come to know that the author is alluding to certain experiments which he describes, which show that "the resolution of certain complex states of consciousness, (*viz.*, sensations of sound and sight) cannot be effected by consciousness alone, but by applying the methods of physical science to the physical conditions of these states of consciousness." * The "considerable haste," with which the work was necessarily composed, may account for the needless reference to this un-psychological method of analysis in this passage, and to the omission of all needful explanation by foot-note of what is alluded to.

Still continuing our remarks on the desideratum of a brief introductory chapter on consciousness in general, we may observe that some illustrative explanation of the complexity of every, however apparently simple, state of consciousness, and of the nature and presence of the metaphysical elements, not separable from the mental state, but by the exercise of reflection discernible in it, would have been very helpful in facilitating the student's comprehension of the author's analytical exposition of the process of sense-perception. Consciousness viewed as an object, for instance, is complex, containing various elements which stand in definite relations to each other and to the conscious subject, all of which are capable of being perceived in reflection, though not all will be equally prominent at the same time. Some one of these may for the time seem to draw the whole attention to itself, and the others may retire into the background. The materials for this analysis are potentially present, and it is for the psychologist, by careful discriminative reflection, to drag them from their comparative obscurity and bring them into clear light. It is superfluous to remark that Dr. Jardine is familiar with these peculiar operations and products of psychological analysis. It is implied in almost every page of his work, but not the less is an express exposition, however brief, of its leading features desirable.

We have seen that Dr. Jardine restricts the application of the term consciousness to the knowledge which every individual has of his manifold mental states and operations, and we have no intention of disputing this restriction. But it is open to us to point out that within these limits the term is still legitimately employed in varying degrees of latitude, and an explicit discrimi-

* p. 34.

nation of these wider and narrower applications of the term in different points of view, prior to his plunging into the thicket of the problem of sense-perception, through which with such delicate care he threads his way, would have rendered his course much easier, and have precluded the necessity of those occasional foot-notes and references to forthcoming explanations which, as they stand, look very much like after-thoughts.

Those dear distinctions, expressed by the correlative terms *subject* and *object*, *ego* and *non-ego*, and other unfamiliar words of the same character, which are so plentifully and, we suppose, unavoidably strewn over the pages of all modern treatises on psychology, would then, in their various spheres of mutual exclusion, have become intelligible to the student beforehand, and he would only have to learn to apply these terms with intelligence and discrimination when studying the author's exposition of special modes of consciousness in presentation and representation. We may illustrate our meaning by referring again to Mr. Mill's criticism on Sir W. Hamilton's novel and illegitimate extension of the term consciousness so as to include within its sphere objects of the external world. In one passage in his *Lectures* Sir W. Hamilton, as we have seen, asserts that the objects of acquired perception, *e.g.*, the inkstand lying before us, is comprised within the sphere of consciousness. Mr. Mill, after quoting the passage, makes the following remark: "In being conscious of those of our mental operations which regard external objects, we are, according to Sir W. Hamilton, conscious of the objects. Consciousness, therefore, is not solely of the *ego* and its modifications, but also of the *non-ego*."* According to Dr. Jardine, "those phenomena are called mental which manifest themselves in consciousness," and "consciousness is the power by which every individual possesses of becoming aware of the various feelings and other phenomena which are experienced in his mind." Now, we hardly suppose he would describe an inkstand as a mental phenomenon, and hence we might easily conclude that, as he would disallow the comprehension of the inkstand within the sphere of consciousness, he would also disallow a consciousness of the *non-ego*. But this would be a mistake. Using scientific language, he would, we apprehend, deny, with Mr. Mill and philosophers generally, a consciousness of external objects, and assert with him that consciousness is of the *ego* and its modifications; but still, none the less, does he vindicate to consciousness a cognizance of the *non-ego*. The reconciliation of this apparent discrepancy lies in the fact that these correlatives, *ego* and *non-ego*, are employed, in different points of view, in varying breadth of signification. The consciousness contemplated as the soul animating

* Mill's *Examination*, p. 139.

the whole organism stands over against the world of extra-organic or external objects, as the *ego* opposed to the *non-ego*, and in this legitimate application of the term consciousness, it may be truly said that we are conscious of the *ego* and its modifications, and not of the *non-ego*. But in this consciousness viewed as ranging over the organism, inner differences are discovered by the operation of reflection. It is by the exercise of a higher degree of consciousness energized by earnest attention, that the bodily organism itself is regarded as belonging to the sphere of the *non-ego* and the term *ego* is then applied, in contradistinction to it, to the mind alone. Now, in this narrower application of the term, Dr. Jardine, as we understand him, does assert a consciousness of the *non-ego*, when by reflection, sensations of which we are conscious, and which are organic affections as well as mental phenomena, are discerned as objects distinguished, but not divided, from the conscious soul.

As we have purposed giving merely an illustration of the kind of questions which we think demand some notice and discussion, there is no need of carrying this analysis further into the inner circle of purely psychical phenomena, within which also the distinction of the *ego* and *non-ego*, already alluded to, may be perceived. It is, however, obvious that the unqualified general statement, that consciousness is of the *ego* and its modifications, may sometimes mislead, and that not unfrequently the query is needed,—*which* of the various *egos* and *non-egos*, with which psychology is conversant, is referred to? Below a general verbal coincidence, there may lurk a divergence of doctrine which is practically immeasurable.

The same apparent confusion, explicable in the same way, obtains in the use of two other correlative terms—*subject* and *object*. These terms point to a radical and ultimate distinction, which is discernible in every form of mental phenomena so far as they are within the domain of consciousness. They are, therefore, indispensable terms in any scientific treatise on psychology, but, mainly owing to the variety of their application, they are a source of considerable perplexity to the youthful aspirant to metaphysical learning. For like the parallel term *ego*, the term, *subject* may in different points of view be subjective and objective. These latter words, moreover, have travelled out of the region of mental science, and have fallen into the hands of popular writers on other subjects than philosophy; this, however is a doubtful advantage. Like coin which has been long current and has passed through many hands, the distinct and sharp outlines of the image pressed upon them have become somewhat blurred and confused. They were originally like Siamese twins, to whom severance would be death, but "subjectivity" seems to have dissolved all connexion

with an "objective," and to maintain a vigorous independent existence of its own.

Sensations, being cognized by consciousness as experienced by the sentient soul are, as Dr. Jardine says, "subjective." * This is the first time, as far as we have observed, that this word is introduced to our notice in the treatise and, although an eminently serviceable term, it is also ambiguous. The author, very prudently, guards himself from being misunderstood by appending an explanatory foot-note. "The term *subjective* is here used in a general sense to distinguish what is organic from what is extra-organic. We shall see hereafter that there is an objectivity in this subjective."† The signification of the term is here determined and explained by its being set over against all objects which are outside of the material organism. But as the subjective sensations possess also an objective aspect, it would have helped to clear up the mystery of "an objectivity in a subjective," if, prior to his application of these terms in the exposition of sense-perception, he had unfolded in a simple way their general signification and their variety of application, according to the range of the object-matter upon which reflection is exercised. And all this, we conceive, would naturally and properly have formed a place in a general survey of consciousness, pointing out its different legitimate meanings in the science of psychology, its universal essential elements, and explaining, in an illustrative manner, the process and results of mental analysis. The distinctness and vigour of Dr. Jardine's thinking, the unaffected simplicity of his style and the masterly way in which he handles many of the most critical questions which demand a decision in a treatise on the psychology of cognition, are ample evidence, that, should he agree with this suggestion, he could augment the usefulness of his work, by enriching it, in a second edition, with an exposition of consciousness, as a preliminary to his detailed investigation of one mode of it.

More effort has been expended upon the explanation of the process of sense-perception than upon any other operation of the human mind. It is, in its rudimentary elements, the first that comes into exercise, and it is that, which, in some or other of its modes, never ceases, during life, to be active. To most people its processes seem to be as easy of comprehension and explanation as the performance of them seems simple. But any serious and earnest attempt at explanation soon brings to light strange and unimagined difficulties, and the unraveling of the tangled skein is then perforce admitted to be an operation of critical delicacy, and perhaps of doubtful success.

The facility and apparent simplicity of perception in the matured

* p. 20.

† p. 20 n.

condition of the mind is no guarantee, and but very slight evidence, that it is not to a great extent an acquired power, and the product of elements which originally are very disproportionate and different to the developed and compound result. The marvellous character of the change that has taken place in the course of this acquisition is apparent when we place side by side a description of the sensations, out of which, as is admitted on all hands, the products of perceptions are evolved, and a description of the amount and variety of knowledge, which the organ of vision, for instance, in our adult condition conveys to us.

In that storehouse of oriental imagination, the Arabian Nights' Entertainments, there is, unless our memory plays us false, a wonderful story of the evolution of a stupendous *jinn* or demon from a small box which a fisherman by chance had dragged up from the depths of the sea and had the curiosity to open. The fisherman, as the story runs, terrified at the sight of this colossal spectre, ingeniously suggested to the demon, that he should at once *introduce* himself back into his tiny case, just to show that he had grown to such mighty proportions from such insignificant beginnings. The thing was done.

Now this *jinn*, as it emerges from the box, may be compared to sensations as they pass out of the dim unknown into consciousness, and the portentous image may represent the complete perceptions, both acts and products, which are developed from these sensations. The problem of psychology is to explain this development and justify the natural beliefs and conceptions which matured perceptions invariably carry with them. There is a wide, and we fear, irreconcilable difference in systems of philosophy as to the nature and contents of these sensations as they emerge into consciousness, and this difference expands into a gulf which cannot be bridged over, as to the external existence of the objects of these natural beliefs; but rival systems of philosophy are at one in representing the prodigiousness of the contrast between the rudimentary sensations and their matured products.

We doubt the possibility of composing a treatise on psychology of any worth or merit on an eclectic system, and it is no matter of surprise or blame that Dr. Jardine does take a side in the great controversy between the intuitive and associational schools of philosophy. But it is one, and not the least of the special merits of the work, that the author, while expressing with quiet assured firmness his own opinion on those conflicting questions, which lie at the bottom of the discussion, does, on every occasion as far as we have observed, state the side of his opponents with judicial fairness. The facts and arguments advanced by both parties are marshalled in methodical order, and the determining reasons of his own conclusion on the matters in dispute are adduced and, frequently

with a quiet remark expressive of his own belief, often inserted as an *obiter dictum*, the student is left to form his own opinion. With the very best intentions of being fair, an advocate of one system of philosophy not unfrequently fails in representing an opposing system as it appears to its adherents. Very few are able to strip themselves of pre-conceived notions and unconscious prejudices, and take up exactly the point of view of an opponent. No one, we think, whatever be his own views on the philosophical controversies which are now being somewhat eagerly discussed, can read the *Psychology of Cognition* without being convinced of the author's sincere attempts to be fair, and giving him great credit for the success of his attempts.

All psychology of cognition must, as we have seen, begin with an examination of sensations ; and it is in the method of explaining the character and contents of these elementary mental phenomena, that the indications of the great rift in philosophical systems are discerned. It is here that the closest analytical scrutiny is needed. Therefore the author, after, by way of introduction, giving an illustration of the complex nature and object of perceptions, and showing that they are ultimately resolvable into sensations, proceeds to an investigation of these sensations, discussing their nature, their relations to one another, and to consciousness in which they are known. But sensation, which is a mental phenomenon, must be distinguished from that excitement of the nervous system which is its indispensable condition. Consciousness reveals to us directly the presence and the special quality of a sensation, but does not also make us cognizant of these requisite physical conditions, any more than it informs us of the undulations of the air and ether which, as scientific men assure us, are the essential conditions of sound and sight. These matters belong to the sciences of physiology, acoustics, and optics, which give us an explanation of the physical conditions or causes of sensations, and therefore are not to be altogether ignored by psychological writers ; but they give us no explanation whatever of sensations themselves. It is learnt indirectly that a certain state of the nervous organism is essential to the existence of a sensation, but the sensation itself, its nature, quality, and elements, is known only by consciousness. Dr. Jardine, therefore, wisely, as we think, declines giving any detailed account of the nervous system, and does not clothe his ideas in that physiological phraseology which figures so largely in Mr. Bain's psychological works. The field of investigation borders closely upon physiology on one side and metaphysics proper on the other ; Dr. Jardine steers clear of both.

We annex below a tabular classification of the varieties of sensation of which we are conscious, in many respects similar to the elaborate enumeration given by Mr. Bain :—

- | | | |
|---------------------------|---|--|
| I.—Of Organic Life | { | 1.—Connected with the muscles, bones, tendons, &c.
2.—Connected with the nervous system.
3.—Connected with the circulation and nutrition.
4.—Connected with the general state of the organs, as heat, &c.
5.—Connected with the respiration.
6.—Connected with the digestion. |
| II.—Of Intellectual Life. | { | 1.—Organico-Intellectual { <i>a</i> Smell.
<i>b</i> Taste.
<i>c</i> Touch.
2.—Intellectual ... { <i>d</i> Hearing.
<i>e</i> Sight. |

Dr. Jardine disposes of the first class of sensations, *viz.*, "those of organic life" very summarily. Those physiological explanations of this class of sensations which occupy so large a space in Mr. Bain's semi-psychological Treatise on the Intellect are here put out of court. By a general, though, of course, not absolute, division, they are adjudged to be outside the domain of a psychology of *cognition*. "The general characteristics of these sensations are that they arise in the organism itself as the concomitants of vital operations, and that they are accompaniments, results, or stimulants of action, not elements of knowledge."*

It is simply the fear of prolonging this notice to an unconscionable length and wearying the patience of our readers that prevents our commenting on Dr. Jardine's admirably lucid chapter on the sensations of the definite organs, and the possibility of their being analysed into other elements, conscious or unconscious.

His chapter, however, on the revival and association of sensations we confess ourselves wholly unable to follow, and we think it is inconsistent with the various remarks on the nature of sensation which are scattered through his exposition of the theory of perception. The absence of an index to the book, not at all compensated by the very brief table of contents, is a very serious defect, which may be accounted for and excused by the circumstances in which the work was composed, but still none the less to be deplored. A not less grave defect is the absence of a vocabulary, or precise definitions of the somewhat numerous technical terms which are so frequently introduced. The difficulty we experience in accepting his views on the revival and association of sensations may have arisen from Dr. Jardine's peculiar and unexplained use of the term sensation. Every writer has a perfect right to affix his own meaning to the terms he uses, provided he adheres

consistently to his use and gives the reader fair warning. But in this case we are precluded from resorting to this method of surmounting the difficulty by the fact that the author does adopt substantially that view of sensation as implicating the organism and as being in all its forms an organic affection as well as an affection of the sentient soul, which is sanctioned by Sir W. Hamilton and all modern intuitivists. He says, "although sensations are objects of consciousness, they are also inseparably connected with our physical organism."*

We have been accustomed to regard sensations as revealed in consciousness as complex mental states, containing elements which, though not really separable, may be viewed apart, and possessing that real though partial truth which belongs to all abstractions. One of these elements, termed sensation proper, belongs to the department of feeling, and one, termed perception proper, belongs to the department of intellect. Such a thing as sensation proper, so far as it is within the purview of consciousness, apart from actual or possible perception, has only ideal existence, and, though subjective, in the sense already explained as belonging to the soul, belongs to the soul as animating the material organism. These elements of the state of consciousness in their various relations may not be recognized at all, and certainly may not be discriminated in the state of consciousness, at the time; but the materials for the discrimination are there, and may be discerned by a subsequent reflective act and recognized as having been present. Without endorsing the affectedly mathematical language of Sir W. Hamilton on this point, the truth is that both these elements of feeling and intellect are present in varying degrees and tend each to exclude the other, without altogether excluding it. Each element will not be equally prominent and distinct, but whichever be for the time the more prominent, the other also will exist in a nascent form. We are not aware that Dr. Jardine would not coincide with these rather common-place remarks. We rather think he would at once virtually endorse them. He allows that sensations are really felt within our own bodies, are "organic." It is true, he also alleges, that sensations are "purely mental." But he guards himself from being understood in the obvious sense of mental, as contra-distinguished from material, by adding in a footnote that purely mental means here, "knowable by no other instrument except consciousness." "There is an objective, that is, non-mental element made known by sensation." It is not clear whether in this word "non-mental" we have a contradictory of the "purely mental," that is, an element knowable by some other instrument than consciousness, or we have an equivalent for material.

The former interpretation does not seem probable; the latter is more in accordance with the usual meanings of the terms mental and non-mental, and refers apparently to that conscious implication of the organism in sensation which is all-important in the development of the author's theory of perception.

Now this conscious connexion with the organism is the *differentia* of sensation, which marks it off from another class of feelings termed emotions. Both are subjective, both are pleasurable or painful, or, to adopt Mr. Bain's division, neutral, but one is a consciously *organic* feeling; the other not. Dr. Jardine states: "In the earliest or simplest stage of knowledge it is, perhaps, difficult to say whether the phenomenon should be classed as a feeling or cognition."* But here, as by the terms of the question, we are considering sensations as *revealed in consciousness*, for "the essential character of a sensation is that it is felt and felt consciously," we have little doubt that the mental states of which sensations form a constituent part may be classed with both. The sensational element is feeling, with this speciality that it is at once both mental and corporeal; the intellectual element is cognition. Whether this intellectual element is to be termed perception, original perception or perception proper is a question of terminology, and we observe that Dr. Jardine systematically reserves the term perception to the acquired power and its acts, and adduces reason for this restriction.† Most probably, he would agree with Mr. H. Spencer in asserting that all perceptions are acquired perceptions. There is no objection to this employment of the term. But in consistency he cannot deny the presence of an intellectual element in conscious sensation which, however rudimentary, is of the *nature* of perception, if it is not so designated. The fact of an original perceptive element is implied in his speaking of perception being "more or less complete," according as more or less of the senses have been exercised and educated. The necessity of admitting the same fact follows from his remarks on the power of localizing sensations. It is not questioned that the acquisition of this power, when exercised with precision and exactness, is largely dependent on experience, but the rudimentary germ of the power must have previously existed or it could never, in any *natural* sense of the term education, be educated at all. In truth the distinctions between sensation proper and perception proper laid down by Sir W. Hamilton, are virtually and impliedly accepted by Dr. Jardine, and had he in the course of his exposition explicitly stated these elements of sense-perception in their different functions, relations and characters, he would, we think, have been

* Page 2.

† Page 140.

preserved from falling into a confusion of thought, between *sensations* which require as the condition of their existence a certain state of the organism, and which are, as known to consciousness, mental *and* organic affections, and the special operations and properties of the intellect alone.

This confusion comes to light in that chapter on the revival and association of sensations, for the examination of which we have, at perhaps undue length, been preparing the way. The author's opinions on this point are expressed in the following passages:

"The possibility of the revival of a sensation once experienced is a fact familiar to every one. But the sensation as revived is not the same as when actually experienced. It is idealised, it appears more refined, farther removed from the sense than it was originally. Illustrations of this are numerous and familiar. If we have once seen a fine building which has made a great impression upon us by its architectural beauty, a very slight effort will serve to recall before our minds its colour and outlines. We imagine almost we see it. So of sounds. We are familiar with the voice of a friend; in his absence it is quite easy to recall the tones and quality of his voice; we fancy we hear him speaking. Other sensations of taste, smell, and touch, are capable of revival in a similar manner, some more vividly, more approaching the original, than others, but all to a greater or less extent."*

And then, after a vindication, extracted from the *Psychology* of Mr. H. Spencer, of his resolution to pass by the supposed inter-connexion of nervous movements with "revived" or "idealised" sensations, he remarks as follows:

"Leaving out of account, then, the correlation, or inferred correlation between physical and mental events, as only of secondary and occasional importance in the explication of our subject, we proceed to the study of the revival and association of our sensations as revealed in consciousness. If a clear bright light be kept for a short time before the eye, and then removed, the sensation will persist for a time, and at intervals, perhaps, be revived. The same is the case with tastes, smells, and other sensations. But the sensation, as persistent or revived, is not so clear and vivid as it was originally—it has become idealised. The appearance before consciousness of idealised sensations is not fortuitous, but takes place in certain regular and connected series. Sensations of different *quality*—that is, of different senses—are connected together, so that an actual sensation of one kind will serve to introduce before consciousness idealised sensations of other kinds. The sight of a particular

"kind of fruit with which we are acquainted at once makes us think of its smell and taste."*

It is admitted that a sensation occupies time and requires time. The sensation sometimes exists after the material impression has ceased to exist. As in the instance quoted, a flash of light is virtually instantaneous, the sensation of light lasts longer. But this persistence of a sensation is not the same thing as the revival of a sensation, as Dr. Jardine seems to remark: "The sensation as persistent or revived." Then, again, the only instances expressly quoted are taken from the class of sensations which he terms intellectual, and from that member of that class which is the most intellectual. All sensations as states of consciousness contain an intellectual element, but they differ among themselves, as Dr. Jardine's classification indicates, as to the degree in which the intellectual element obtains. Now this *intellectual* element can be revived, and, when revived in imagination, is idealised and refined; but the sensational element, the sensation *quâ* sensation, cannot be revived at all. The sight of a fine building, remarkable for its architectural beauty, will make a great impression upon us, if our perceptive faculty and æsthetical tastes are highly developed; but the seeing of such a fine building surely is not a sensation, but an act of "acquired perception;" and the objects of such acts can be recalled as mental representations, but surely not as sensations. "The sight of a particular kind of fruit makes us think of its smell and taste." *Think* of its smell and taste! If we have a weakness for Bombay mangoes, we can *think* of a particularly fine specimen, we can *think* of filling our mouths with the luscious pulp, and we can *think* of the rich, delicious flavour, and this various *thinking* may make our mouth water and so will give rise to a *new* sensation, but surely Dr. Jardine will not pretend that this thinking is a revival, even in an idealised form, of the original sensations. To *think* of the smell and taste of a particular kind of fruit is not having the "consciously felt" sensations of taste and smell. If sensations, even in a refined form, could be revived, *without the material and organic conditions being fulfilled*, (in the ordinary and normal state of the human mind) how many a needy hungry man would gladly revive the sensations of a good dinner he had enjoyed the previous week by getting a stealthy view of a gentleman's richly furnished table, or by surreptitiously peeping into a cook's shop. Some of us have experienced the sensations of tooth-ache or perhaps gout, and these sensations, if the attack was at all aggravated, have been very acute and impressive, and we have a lively memory of the pangs. But we are not able, and thankful that we are not able, to revive those sensations, even in a very refined

form. In fact, sensations and, what Dr. Jardine, as it appears to us, is confounding with them, operations of intellect, are quite different things in kind. A sensation is not an idea, and neither phantasms nor ideas are revived sensations. Of course we are very far from supposing that Dr. Jardine, as a philosopher, should be classed as an adherent of Condillac's sensationalism, but one who read this chapter only might very plausibly argue in favour of his being rightly so classed. The learned Doctor does not say in so many words *sentir c'est penser*, but if his language be accepted in its obvious meaning, he confounds thinking about sensations with having sensations.

The remarks on the necessary conditions of the consciousness of self are clear, and the position which they occupy in the synthetical development of the treatise appears to be well chosen. We notice, however, some expressions which require a little modification or detailed exposition. "The universal condition of knowledge is relativity; nothing can be known except as related to, and distinguished from, something else." "Everything is known to be what it is by being thought of as different from what it is not." This phrase "relativity of knowledge" is sprung upon us without a word of warning or note of explanation, and yet the author is well aware that it is equivocal, and is employed in very distinct senses by different modern writers on psychology. Objects of knowledge are related, as is implied in the very word *object*, and the act of knowledge constitutes a relation between the object known and the subject knowing. Knowledge is thus, in every form, a synthesis. But if the "something else" be another object of knowledge, with which the first is compared, and not a metaphysical element in the complex act, we must demur to the statement. Comparison and contrast unquestionably make our knowledge more distinct and vivid, but to assert that they are the necessary condition of *all* knowledge is to destroy the possibility of knowledge *altogether*. For, on the supposition that the first object could not be known till a second object was known to compare with it, the question arises, what becomes of the first object which *ex hypothesi* is unknown. Could there ever be a first object? On this theory, although it is sanctioned by great names, knowledge seems to be like an arch springing from non-existent piers. If the term knowledge is restricted to subsequent cognitive acts which *do* include comparison, there is no objection, provided it be so notified, and the prior existence of some intellectual act of the nature of cognition be allowed as the necessary condition.

"Thus, the only explanation which we can give of the nature or origin of our notion of self is a simple analysis of the notion itself and an opposing of its elements to their correlates." The nature of a notion is not to be regarded as identical with the

origin of it. The two questions may be closely allied, and may shed light upon each other, but still they are distinct. The question of the *origin* of the conception of cause is a different one from that of its *nature*.

One unfailing test of the character and merits of a Psychology of Cognition is its solution of the difficult and important question of the origin of our notion of extension, and then, as intimately connected with and directly growing out of it, the origin of our belief in the existence of an external world. Dr. Jardine's method of handling these critical problems deserves unqualified praise. The author, as might be expected, exhibits familiarity with the present phases of the controversy, states both sides with most commendable fairness, and displays an amount and depth of original thought, which may have been exerted, and we have no doubt have been exerted in other portions of the treatise, but in truth are not so apparent. In fact, the theories on these subjects which he combats are in the main, as we understand him, "that prevailing system of psychology, which may be indicated by the word phenomenalism," "to show the inadequacy and unsatisfactoriness of which," was, as he states in the Preface, "one principal object which he kept before his mind in the preparation of the book."

The author's remarks on the two points mentioned above are contained, as was, perhaps, unavoidable, in different parts of the book, but a complete view can only be secured by reading them together. Here, again, we have to complain of the absence of a copious index and of a sufficient number of references backwards and forwards to the various places in which the subject in hand is more or less fully elucidated.

The fact of the existence of the notion of extension and of the belief in an external world cannot be gainsaid. The question is, how to account for the existence. The theory of an *à priori* latent conception of extension which springs up into consciousness on the occasion of sensation can only be justified by the failure of any other attempt at explanation. Pending an examination of other given explanations, it is provisionally abandoned. Accepting the justness of the author's criticism on the inaccuracy of the well-known division of systems of psychology into intuitive and associational, yet, as these terms are well-known, the alternative theories to be propounded in explanation of the genesis of the idea of extension and of the belief in an external world will be easily and satisfactorily discriminated and recognized by these names. The author accepts and defends the former. The associationalist theory postulates sensations and association of ideas, and out of these elements only, variously combined, professes to account for all our notions and beliefs whatever their nature and character, relative to material qualities and material things—and, indeed, everything

else. It is obvious that the associational doctrines on these two points demand searching examination, and if there be anything fallacious in the result, it is most likely to exist and be discovered here in the initial step.

Sensation and association then merit and receive the author's close attention, and his critical eye discerns two errors; an error of *defect* in the doctrine of sensation, an error of *excess* in the doctrine of association. The analysis of sensations reveals nothing to Mr. J. S. Mill and others whom he may be taken to represent, beyond feelings differing in quality and degree, and occurring either simultaneously or successively in time. Now the notion of extension is generically different from the notion of time; generically different also from the special quality of a sensation. In what way then do sensations which individually do not contain the element of extension come to possess it when in combination? It is not easy to believe that an accumulation or multiplication of nothings will give a something; and it will require strong proof and very patent evidence to establish the fact, that while no single sensation experienced apart can possibly originate the notion of extension a plurality of extensionless perceptions when experienced together can. But this strong proof and this patent evidence is what Mr. J. S. Mill is committed to produce; we quote at length the proof which Mr. J. S. Mill gives of this position, and, as a fair sample of Dr. Jardine's thought and method, his comments upon it.

"Suppose," says Mr. Mill* "two small bodies, A and B, sufficiently near together to admit of their being touched simultaneously, one with the right hand, the other with the left. Here are two tactual sensations which are simultaneous, just as a sensation of colour and one of odour might be; and this makes us cognise the two objects of touch as both existing at once. The question then is, what have we in our minds when we represent to ourselves the relation between these two objects already known to be simultaneous, in the form of extension or intervening space—a relation which we do not suppose to exist between the colour and the odour?" Our answer to this is, "that whatever the notion of extension may be, we *acquire* it by passing our hand or some other organ of touch in a longitudinal direction from A. to B, that this process as far as we are conscious of it, consists of a series of varied muscular sensations. When we say that there is a space between A and B, we mean that some amount of these muscular sensations must intervene; and when we say that the space is greater or less, we mean that the series of sensations (amount of muscular effort being given) is longer

* Page 51.

or shorter. If another object C, is farther off in the same line, we judge its distance to be greater, because, to reach it, the series of muscular sensations must be further prolonged, or else there must be the increase of effort which corresponds to augmented velocity. Now this, which is unquestionably the mode in which we become *aware* of extension, is considered by the psychologists in question to *be* extension. The idea of extended body they consider to be that of a variety of resisting points, existing simultaneously, but which can be perceived by the same tactile organ only successively, at the end of a series of muscular sensations which constitutes their *distance*; and are said to be at different distances from one another because the series of intervening muscular sensations is longer in some cases than in others. An intervening series of muscular sensations, before the one object can be reached from the other, is the only peculiarity which (according to this theory) distinguishes simultaneity which may exist between a taste and a colour, or a taste and a smell; and we have no reason for believing that space or extension, in itself, is anything different from that which we recognise it by.* Here then is an attempt to explain extension by one who does not think extension is involved either in single sensations or in the relations of different but simultaneous sensations. Let us examine the attempt:—

1.—It is assumed that extension is identical with that by which it is recognised or measured, that is with a succession of muscular sensations occupying time. But this is by no means to be admitted. The amount of force with which a ball is expelled from the mouth of a cannon is recognised and measured by its velocity, that is, by the number of feet which it traverses in a second of time. But no one ever maintains that force is identical with velocity. In the same way, although extension is measured by muscular sensations occupying time, to say that the former is identical with the latter is quite unwarranted.

2.—Why is it that *muscular* sensations are chosen to fill up the intervening space between one point and another? *All* sensations are *ex hypothesi* equally destitute of extension. The two points, A and B, are recognised by two sensations, and must be assumed not as points in space, but as points in time, because the idea of space is not supposed to be known. Let then the point A, be marked by a particular sensation, say of smell; a number of intervening sensations, muscular sensations, or any others differing in intensity and duration, take place. Then another point of time, B, is reached, marked by another sensation. Thus, here we have two points, A and B, points in time, and recognised by two

* Mill's 'Examination of Sir W. Hamilton's Philosophy,' pp. 273-275.

distinct sensations, separated from one another by a number of intervening sensations, say of sight, or hearing, or smell, differing in intensity and duration ; is the result of this an idea of extension or space? Certainly not. The mere statement of the problem, substituting for "muscular sensations" any other kind of sensations, is sufficient to show the absurdity of deducing the notion of extension from that of sensations succeeding one another in time.

3. The reason why muscular sensations are chosen to fill up the space between the points A and B, instead of sensations of smell, or taste, or colour, appears to be that the former kind of sensations is expressed in *motion*, which *involves* extension, and the points A and B are really points in space. For let us eliminate carefully from the data all spatial elements, and see what follows. The sensations by which they are marked are at first supposed to be simultaneous. In this there is only time. But the idea of space is said to be acquired by passing the hand from A to B. Supposing the hand is at A. Here is a sensation in time. B as yet does not exist, because the existence of the point must not be assumed till the sensation indicating it has taken place. The hand leaves A ; the point A ceases to exist, except in memory, because the sensation indicating it has ceased. The hand reaches B, a new sensation takes place, a new point in time has been reached. But where is A? In memory. It is a point not now existing, except in past time. To speak, therefore, of two points of time existing simultaneously is altogether unmeaning. And Mr. Mill's explanation is quite unintelligible unless the points are tacitly assumed to exist in *space* and the muscular sensations to result in *motion*. Thus the very idea, whose origin the theory professes to explain, is quietly assumed at the beginning of the explanation.

This theory which is called by Mr. Mill, the psychological theory, but by Dr. Jardine, with simpler descriptiveness, "the muscle-and-time theory," is therefore rejected as untenable ; the *à priori* theory of Kant is for reasons which are adduced placed in the same category. The ground being thus cleared, the author lays out that explanation of the origin of this notion which he himself adopts. It is in connexion with this exposition he develops the idea to which he had previously alluded ;—the character and contents of sensations regarded as objects. Considered as objects, sensations have laws of existence and mutual relations of their own and independent of our consciousness of them. They are recognised as being foreign from the subject in origin, and, moreover, these sensations as objects of consciousness are, originally, however vaguely, localised, or felt to occupy some particular portion of space. "Sensations appear to have two sides, or to stand in two relations. The one is inward, and becomes the

"object of consciousness; the other is outward, and is localised
 "in the organism. What is on one side feeling simply, is on
 "the other side objectified and localised feeling. And thus in
 "objectified sensations there is involved an element which presents
 "extension directly to consciousness."*

"In conscious knowledge (*i.e.*, as regards sensations), there is an
 "ego and a non-ego, a subject and an object, known in contrast
 "to one another. The object is an affection of the sensorium, a
 "sensation of some kind, say of colour, resistance, or sound.
 "But although a sensation, it *is* or *reveals* a veritable non-ego
 "in immediate contrast with the ego. Conscious knowledge is,
 "in fact, impossible which does not set an object over against a
 "subject; and in relation to perception that which is thus
 "objectified is a sensation. Thus sensations, although immediately
 "known in consciousness, are not therefore purely mental; they
 "contain a foreign element, they belong to, or constitute, the
 "non-ego of our immediate knowledge."† This is the author's
resumé of Sir W. Hamilton's doctrine on the subject which he
 considers correct.

In this statement the physical organism is not *assumed* to exist.
 The appeal is to the authority of consciousness. A thorough-
 going analysis of sensational consciousness, contemplated in
 its objective aspect, brings to light this element of knowledge,—the
 idea of extension, in a vague and rudimentary form, no doubt,
 which subsequently is elaborated and perfected by abstraction.
 These sensations are localised, and the "co-existence of these
 sensations at the same point of time implies their mutual exter-
 nality, and therefore involves the idea of extension or space."
 "This relation of mutual outness is the simplest form in which we
 perceive extension." "Some sensations, *viz.*, of sight and touch
 are not merely localised in a point but diffused over a surface."

It must be borne in mind that the question is not at all con-
 cerning *figure* or *definite* extension, but simply extension however
 indefinite and however small. The point of a needle possesses
 superficial extension.

It is associationalists who, in the interests of their side of the
 controversy, generally miss seeing the exact issues of the question,
 that usually confound the matured and developed notion of exten-
 sion with the elementary idea of it which is revealed in some
 simple state of sensational consciousness. But an idea of exten-
 sion, however elementary, is not a idea of time-succession: and that
 such an idea is given by vision, Mr. J. S. Mill is compelled to admit,
 though he attempts to evade the consequences of his admission by
 denying the identity of such a conception with the perfected

* Page 57.

† Page 134.

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* J.

knowledge of extension which is derived from the conjoint operation of sight and touch ;—a position which is not asserted. " A rudimentary conception must be allowed, for it is evident that even without moving the eye we are capable of having two sensations of colour at once, and that the boundary which separates the colours must give some specific affection of sight, otherwise we should have no discriminative impressions capable of afterwards becoming, by association, representative of the cognitions of lines and figures which we owe to the tactual and the muscular sense. But to confer on these discriminative impressions the name which denotes our matured and perfected cognition of extension, or even to assume that they have in their nature anything in common with it, seems to be going beyond the evidence."* After admitting that sight, apart from the muscular sensations which accompany its ordinary exercise, would of itself give us an impression, though " vague, indistinct and rudimentary" of a boundary between two colours, it is not easy to understand how both the two colours and the boundary together should not occupy space, and how sight should not contain an element which has something in its nature common with our matured cognition of extension. In developed perception sight contributes more than touch to the interpretation of perceptions common to both, and almost everything perceived is judged of by its visible marks.

It may be remarked that the mode of explaining the origin of our idea of extension by intuition adopted by Dr. Jardine is identical with Sir W. Hamilton's theory, and is stated almost in his words: " In the consciousness of sensations, relatively localised and reciprocally external, we have a veritable apprehension, and consequently, an immediate perception of the affected organism, as extended." †

But we venture to think that Sir W. Hamilton's carefully fenced and guarded statement is the more accurate of the two. We believe that Dr. Jardine would readily subscribe to the truth of the quotation we have made from Sir W. Hamilton's *Dissertations*, but it is noticeable that while Dr. Jardine in general speaks of abstract qualities being perceived, Sir W. Hamilton mentions *extended organism*. Abstracts are formed from concretes, and imply them. Extension is a mental abstraction, and implies an extended object. Now sensations objectively contemplated are not mere abstract qualities, but things or objects having such and such qualities. And although Dr. Jardine does limit the application of the term perception to the knowledge of external extra-organic objects, (to which limitation we take no

* J. S. Mill's *Examination*, p. 293. † Hamilton's *Reid*, Vol. II, p. 884.

exception) yet, as we have seen, when he alleges that perception is "*more or less complete*," he by implication admits the existence of prior acts of knowledge, which, as *incomplete* perceptions, must be placed in the category of perception. In a similar way, if the object of an act of complete perception is a material being possessing various qualities, he must allow that the objects of the acts of incomplete perception are not mere abstract qualities, but beings having qualities. In what way these objects, (percepts as they are called,) which are appropriate to each sense, and are of course of very varied relative importance, are subsequently combined into material wholes or unities, is another and difficult question, subsequently and carefully discussed, but one indispensable condition of its being accomplished is the insistence upon the fact that in sensational consciousness there is presented, not directly qualities, but a material object possessing qualities. We have no desire to enter upon the thorny and vexed question of substance and attribute, from which the author has so distinctly warned us off, but still an explicit reference to this point, as a revelation of consciousness, is desirable on account of its close and important bearing upon the *psychology* of cognition, both of act and object. Our remarks on this point have no reference to Dr. Jardine's opinions, but simply to his statements of them, and only to these in their usual form. For occasionally, his language clearly indicates that his general meaning is identical with that expressed by Sir W. Hamilton. For instance,— "there is no such thing as sensation in the abstract which is not a particular sensation of smell or taste or touch or some other ; it is impossible for us to think of these sensations, or to feel them except as being localised." * And again, "the whole complicated organism may be considered as one sense whose intention is first, to *present* to consciousness *objects possessing extension*." †

But as yet we have not got outside the periphery of our bodies. The education of the senses is not completed till the limits of consciousness are transcended, and all the senses are so welded together in their operations that the exercise of some one sense occasionally does duty for all. Qualities originally appropriate to one sense come to be perceived by a different sense, and we learn to see things invisible. The method in which the percepts, as we have termed them, peculiar to each sense come to be combined into complete objects of perception, and projected into space, forms the subject of an interesting chapter ; but of course the author has to struggle with the inevitable difficulty of describing in a linear series, as it were, the process of association and projection of the several sensations, while, in the natural course

of development and education, it is, as regards all the senses, going on simultaneously. There occur various subtle remarks on the mutual relations of sensations and qualities, on the ambiguities of the term quality, and on the phenomenal and noumenal elements of the objects of perception which lack of space compels us to pass over. We must hasten on to notice the method of the author's treatment of that most knotty question in the psychology of cognition;—the origin and character of the belief in a material world. The line of argument which he follows will, we have little doubt, in its main outlines, be inferred by all who are conversant with psychological research from what we have seen to be his theory of the origin of the idea of extension. But still there is something peculiar and we think specially valuable in his point of view of the problem to be explained, which exhibits his appreciation of the nature and exact range of psychological study, and of the necessity of securing a rational secure basis in a system of psychology for the researches of purely physical science.

The result is a view of the relation of the material world to the knowing mind which is somewhat different from the one ordinarily adopted by philosophers of the intuitive school, inasmuch as this world is not regarded as being altogether an independent reality, and which again is opposed to the one-sided and partial theory developed by psychologists of the school of thought, of which Mr. Bain, for instance, may be accepted as the representative, inasmuch as this world is regarded as possessing an independent existence and reality. In the chapter under notice, there are a few sentences which, as containing suggestive hints of the author's theory and as preparing the way for its fuller discussion, may be quoted. "As far as our *knowledge* of the distant *non-ego* is concerned, we have seen that it consists of sensations projected into space and combined variously into different unities called objects. These projected sensations we call qualities, and thus objects are composed of a number of qualities. But objects thus composed are manifestly the creation, to a great extent, of our own minds. The sensations are mental phenomena; the act of projection, and the combination of sensations of touch with those of sight and others, are mental processes. The *foreignness* and *independence* of these objects to the mind are revealed only in the fact that the mind cannot create or annihilate its sensations at will, and that the laws of the combination of these sensations are evidently not mental laws, but laws of a *non-ego*. In the *objectiveness* of projected sensations and their laws there is believed to be involved the existence of some *non-ego independent of our knowledge*."* The reader will under-

* Page 63.

stand that the *non-ego* here spoken of is the external world outside the sentient organism to which it is opposed, and the sensations which are projected are the perceptive elements—percepts—which are constituents of the complex mental state termed sensation. Again, “now the sensible world, in perception, is separated from the mind, although in the analysis of the process of perception we have seen that this separation is not a real one. The sensible world is partly the creation of the conscious mind; and, in the study of psychology, it must ever be borne in mind that the objects of that world combine in themselves both subjective and objective elements—partake both of the *ego* and the *non-ego*. In the study of the particular sciences, however, such as optics, acoustics, mineralogy, botany, as well as in the ordinary affairs of life, it is quite legitimate and, indeed, necessary, to bestow independent existence upon the objects of the senses. This is done for us naturally in the education which our senses receive; and the study of objective science does not require us to leave the stand-point of practical life while the study of psychology does.”*

The point of departure of physical science is the assumption of the reality and existence of the object-matter whose properties, laws and history it investigates; an existence is assumed which is quite independent of the mode in which it is cognized or, indeed, of its being known by any mind. But the point of departure of psychology is earlier and deeper than this. Its aim is to explicate the process of knowledge, to show how we come to know things, and to examine whether we can predicate existence, and if so, what kind of existence, of the objects of knowledge.

And thus the question which psychology must face and in some manner or other answer is this: Is this assumption of physical science justifiable? The fact is indubitable, as Dr. Jardine says, that in the ordinary course of our natural education it does come to pass that we all take for granted the truth of this assumption, and in these days of deep research into the physical forces of nature and into the state of this planet ages before it was inhabited by human beings, the problem of a true psychological explanation of the nature and warrant of this as it were constitutional belief in the independent existence of a material world acquires new and additional importance.

Like the idea of extension, the existence of this belief being undeniable, the obvious questions are; how do we come to entertain such a belief, and is the belief philosophically tenable?

These questions are not without difficulty to those philosophers, who claim for the mind a direct knowledge of material qualities

in sensational consciousness; but the difficulties are indefinitely enhanced when the belief has to be constructed out of purely mental elements, destitute of even a rudimentary knowledge of such qualities. We have already remarked that as regards sensations, the primitive forms of consciousness, the associational school errs, as Dr. Jardine shews, on the side of defect; and now it will be seen that as regards their efforts to construct the belief in a material world out of sensations such as they describe them to be, they err again on the side of excess. The beginning, middle and end of their philosophy is association of ideas. This is the one agency by which all the complex activities of the human mind in all its departments are brought into existence; the one source from which all our cherished beliefs and deep convictions flow. With this magical wand Mr. J. S. Mill claims the ability to conjure into existence out of sensations devoid of the element of space "as vast and as variegated a picture of the universe as can be had on the other theory; indeed, as I (Mr. Mill) maintain, the very same picture."* The marvellous and recent discoveries of astronomy, the ancient and partially deciphered record of geology, everything in earth and heaven in time past, present and to come—the universe in fact as "a vast and variegated picture" is "a mere series of sensations felt and possibilities of sensation inferred." In these words we have not exaggerated Mr. Mill's estimate of the efficacy of association to generate out of extensionless sensations beliefs in a universe practically boundless in space and existing for ages prior to the origin of man. We have only put in a concrete form his own statements: "What is it we mean, or what is it which leads us to say, that the objects we perceive are external to us, and not a part of our own thoughts? We mean, that there is concerned in our perceptions something which exists when we are not thinking of it; which existed before we had ever thought of it, and would exist if we were annihilated; and further, that there exist things which we never saw, touch, or otherwise perceived, and things which never have been perceived by man."† Whether these "things" exist or not, is not now the question. The *belief* in their existence is a fact; and on the assumption that no intuition of an external world ever existed in consciousness, Mr. Mill maintains that the existence of the belief in its strength and range can be satisfactorily accounted for. It is "but the form impressed by the known laws of association, upon the conception or notion, obtained by experience, of contingent sensations."‡ If *such* a belief can be so generated, surely that is amply sufficient. The assumption of an independently existing material world is simply superfluous. It is

† Mill's *Examination*, p. 251.

§ Mill's *Examination*, p. 227.

‡ Mill's *Examination*, p. 227.

"not required that we should have referred these sensations to a substance ulterior to all sensation or possibility of sensation."*

But the enquiry will inevitably arise, is this belief legitimate? Supposing that men are convinced that there exists no objective reality corresponding to this belief, can the belief survive, association notwithstanding? In a similar way Mr. Mill attempts to show that the feeling of obligation is merely a "subjective feeling in our minds," apart from external independent facts to which we understand the feeling as pointing. But if we once come to believe that there exist no objective facts corresponding to this feeling, will the feeling retain its binding force? No doubt, as Mr. Mill illustratively argues, the immediate motive power of reverence and fear of God is the "subjective feeling," but the feeling is based on a belief in the objective independent existence of the Divine Being, and if the belief has no reality, will not the reverential feeling be dissolved?† All these are questions naturally arising out of Mr. Mill's psychological theory, or rather they are merely different aspects of the same question. Ultimately, some feeling or other is all that we are conscious of, and the feeling suggests or reveals external facts. Is the suggestion legitimate or merely visionary? All this, unquestionably, is open to Mr. Mill's stereotyped reply that "we have not yet sufficiently thought ourselves into the theory we deny"‡ —which is quite true, at least as we understand it.

Now, Dr. Jardine summarily puts an arrest upon this magical associational process of constructing a belief in the universe. He lays down a fundamental principle as to the limits of the creative and transmutive power of association which strikes at the very roots of Mr. Mill's psychological theory of the belief in a material world. "It must be accepted as a fixed principle of association that nothing different in *kind* can appear in the result of the process of association which was not involved in the original elements. Now, according to most of the members of the associational school the original elements to be associated are sensations in certain relations. If these sensations are nothing but the activities of the *ego*, if they are purely mental products, it is manifest that the objects into which these sensations are clustered and bound together by association can never become anything else but mental. . . . Objects are clusters of sensations supposed to have a permanent existence independent of the individual mind, in consequence of their mutual coherence and regular recurrence."§ If we consider for a moment the nature of the processes of association and abstraction, we shall see that neither of them can account for the origin of our knowledge of

* Mill's *Examination*, p. 251.

† See Mill's *Utilitarianism*, p. 44.

‡ *Examination*, p. 261.

§ Page 134.

"space. Association unites together sensations, or other objects of intuition, into a compound ; but the compound thus formed cannot possibly contain anything which was not in the original elements associated. Suppose that our only original intuitions are unextended sensations, and the relation between them of succession or time, it will be impossible for any association to convert either sensations or time, or any combination of the two into space. The most elaborate attempt to do so is that of Mr. Mill, and it, we have seen, is a failure."

"Equally impossible is it for the process of abstraction to produce anything not involved in the original objects of intuition, or in the perceived relation between them. . . . Nor is it in any way possible to know by abstraction from objects of consciousness what was not known by intuition in them. Those who maintain the contrary have yet to show its possibility."*

For the purpose of comparison and contrast let us place along side this statement of the limited range and character of the operation of association, Mr. Mill's averment of its almost universal potency "There are associations naturally, and even necessarily generated by the order of our sensations and of our reminiscences of sensation, which, supposing no intuition of an external world to have existed in consciousness, would inevitably generate the belief, and would cause it to be regarded as an intuition."†

The opposition between the two doctrines of association enunciated by Mr. J. S. Mill, and Dr. Jardine is clear and decisive. Plainly the latter has no belief whatever in the reality of what has been not inaptly termed *mental* chemistry. Sensations mixed and combined, or as Mr. Bain divides the varieties of the process, simply, compoundly, and constructively associated, will remain sensations, provided always no other and higher mental element is introduced into the mixture. Supposing we throw in *expectation*, which yet is a different and higher element than sensation, and whose existence is not accounted for by the fact of sensations occurring in a fixed order, we are still a very long way from that condition of mental activity which would give birth to such a book as Mr. Mill's *System of Logic*. Very clear and distinct evidence is required to establish what *prima facie* is highly improbable that all the higher intellectual operations, such as comparison and judgment, as these acts are known in consciousness, as well as the objects of these operations, are the products of associated sensa-

* Page 137. passage, refers to page 221. He evidently used an earlier edition. Dr.

† Mill's *Examination*, p. 227. The edition from which we quote is the *Fourth*. Dr. Jardine, citing this

tions. What is the evidence? If it can be proved that there are processes of generation of intellectual acts and objects out of generically different mental phenomena, which are analogous to chemical combination, it is obvious that the principle which Dr. Jardine lays down as to the limited powers of association must be abandoned. Mr. J. S. Mill refers to the generation of the idea of extension out of radically different elements, but we see that having introduced the element of extension into the mental crucible, that is, having begun with assuming the very idea whose origin he professes to account for, this instance is not in point. The favourite illustration of mental chemistry, quoted from Mr. James Mill's *Analysis of the Human Mind* with approbation in his *Examination*, and adduced by him in his *Logic*,* is the admitted fact "that when the seven prismatic colours are presented to the eye in rapid succession, the sensation produced is that of white. As in this last case it is correct to say that the seven colours when they rapidly follow one another *generate* white, but not that they actually *are* white; so it appears to me that the complex idea, formed by the blending together of several simpler ones, should, when it really appears simple (that is, when the separate elements are not consciously distinguishable in it), be said to *result from* or be *generated by*, the simple ideas, not to *consist* of them."† Unquestionably sensations may combine with sensations, and ideas (which *pace* Dr. Jardine are not sensations, either weak or refined, but something altogether different) may combine with ideas, and by repeated conjunction even coalesce; but the question is about mental chemistry. Will the result of a combination of sensations be anything different in *kind* from sensations? Dr. Jardine, in his remarks on the possibility of complex sensations being resolved into more simple elements instances this very stock-illustration of psychological chemistry to which Mr. J. S. Mill so frequently refers, to show—not that one class of mental phenomena can be generated out of others generically different—but that complex sensations can be resolved into elementary *sensations*. "A well-known optical toy, consisting of a disc of card-paper with the spectral colours painted upon it, and made to revolve rapidly upon its axis, shows that the separate sensations may, by rapidity of succession, become blended together again and form one complex sensation more or less closely resembling the original ones."‡ The proposed method of explaining all the higher processes and products of the mind by means of the single principle of association has a charm for scientific students who realize the potent law of attraction in mechanics and chemistry, but pending the

* Vol. II, p. 441, 8th Edition.

† Mill's *Logic*, Vol. II, p. 441.

‡ Dr. Jardine's *Psychology*, p. 33.

production of higher evidence than has yet been exhibited, we think the associational school attribute to this principle much greater potency than it really possesses, and that the statement which Dr. Jardine makes in reference to its restricted efficacy is true.

As a pendant to our author's criticisms upon Mr. Mill's attempted explanation of the origin of the idea of extension, which we quoted, we give below also his remarks in full on Mr. Mill's well-known Psychological Theory of a Belief in the Material World.

"Beginning with the existence of sensations, he maintains,* 'that there are associations naturally, and even necessarily, generated by the order of our sensations and of our reminiscences of sensation, which, supposing no intuition of an external world to have existed in consciousness, would inevitably generate the belief, and would cause it to be regarded as an intuition.' In support of this he shows that, in certain circumstances, sensations which we have felt recur to us regularly upon the fulfilment of certain conditions; that thus we think of the possibility of the recurrence of these sensations as being permanent, whereas sensations themselves are fugitive; that it is not merely single sensations, which are thus connected with permanent possibilities of them; and that the sensations of these groups occur in a fixed order. "Hence" he concludes, "We speedily learn to think of Nature as made up solely of these groups of possibilities, and the active force in Nature as manifested in the modification of some of these by others. The sensations, though the original foundation of the whole, come to be looked upon as a sort of accident depending on us, and the possibilities as much more real than the actual sensations, nay, as the very realities of which these are only the representations, appearances, or effects. When this state of mind has been arrived at, then, and from that time forward, we are never conscious of a present sensation without instantaneously referring it to some one of the groups of possibilities into which a sensation of that particular description enters; and if we do not yet know to what group to refer it, we at least feel an irresistible conviction that it must belong to some group or other, i.e., that its presence proves the existence, here and now, of a great number and variety of possibilities of sensation, without which it would not have been. The whole set of sensations as possible form a permanent background to any one or more of them that are at a given moment actual; and the possibilities are conceived as standing to the actual sensations in the relation of a cause to its effects, or of canvas to the figures painted on it, or of a root to the trunk,

* *Examination*, p. 227.

leaves, and flowers, or of a substratum to that which is spread over it, or, in transcendental language, of matter to form."* Here, then, we have the external world produced by Mr. Mill from sensations variously associated together.

Now let us pass over the question, how Mr. Mill gets his sensations projected into space, which he does not explain, and refer to another point of more vital importance. He speaks of "the active force in nature," but we may ask how he comes to know anything about such a force? Force is not a sensation, nor is it any association of sensations. This, however, is not the main point of our criticism. "The whole set of sensations," he says, "as possible form a permanent back-ground to anyone or more of them that are at a given moment actual; and the possibilities are conceived as standing to the actual sensations in the relation of a cause to its effects." Let us examine this statement. The possibilities of sensations are conceived as the cause of actual sensations. We have, for example, the sensation of a particular figured colour which is associated with the name of orange. Connected with this sensation there are a number of possible sensations of smell, taste, touch, sound, &c. *The possibility of these sensations is the cause of the colour.* What does this mean? Is the possibility of a smell the cause of a colour? Is the possibility of a taste the cause of a colour? Or is the possibility of all the other sensations of the group taken together the cause of colour? If we ask a scientific man what is the cause of colour, he will answer that it is a ray of light. If we inquire further what he means by a ray of light, he will tell us that it is the insensible vibration of an ethereal fluid caused by some power of a luminous body. This we can understand, but when Mr. Mill tells us that the possibility of a smell, or a taste, or a touch, or all put together, is the cause of a colour, we confess that we do not understand what he means. There appears to be such an utter incongruity between the antecedent and the consequent that we cannot think of them as forming a sequence. And what is true of the sensation of colour, is equally true with reference to all our other sensations. The possibility, as Mr. Mill calls it, of one or more sensations of a group, we cannot think of as being the cause of the remaining different sensation or sensations. But yet this is the only kind of cause which could be reached from the original elements with which he sets out by the help of association. He begins with sensations; he ends with groups of actual and possible sensations having a fictitious objectivity.

If, then, Mr. Mill's laws of association operating upon the original sensations of consciousness do not produce what we

* *Examination*, pp. 24-25.

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believe to be a veritable external world, we have now to inquire whether there is in his method any fundamental defect. The result of this inquiry will simply be an answer to the question formerly referred to, whether some other principle than laws of association be not necessary to explain our belief in an external world? We believe that there is; and that the essential defect of the psychology of which Mr. Mill is an exponent consists in the ignoring of this other principle. In that psychology it is assumed that sensations exist; but no attempt is made to account for their existence, sensations exist in certain relations of co-existence and sequence; in some cases an invariable relation of antecedence and consequence is observed; and by association the antecedent comes to be looked upon as the cause of the consequent. And from this association or phenomenal theory of sensation, we are led to the absurd conclusion that the possibility of a sensation of resistance, or smell, is the cause of an actual sensation of colour. Now it is, perhaps, in the simple original sensations of our consciousness that we are able to see most clearly the fallacy of the phenomenal view of sensation which Mr. Mill accepts. When we have a sensation, say of smell, or colours, or taste, although they are most intimately and inseparably associated together, we never look upon the one as the cause of the other. And yet we do give an account to ourselves of the cause of these sensations. They are something beyond our own control; they come to us unbidden; and our very *powerlessness* with reference to them *compels* us to refer them to some objective *power*. That power is, as far as our consciousness is concerned, unknown. It is *not a phenomenon*, although it is manifested to us in a phenomenon. Thus our conception of a sensation as being a *non-ego* involves a belief, of some veritable objective cause of it, and this intuition of the causal relation, whether strictly original or not must be carried with us through the whole subsequent process by which our perceptive knowledge is built up. By the introduction of the causal judgment at this early state we are able to account for a belief in material body in which will not be involved the absurdity of one sensation, or the possibility of one sensation, being the cause of another of a different kind. According to this view, *phenomenal* body consists of objectified sensations collected together in a group by association; but to this body the educated intellect does not attribute any causal efficiency. On the other hand, *non-phenomenal* body, or matter, as it is called, is simply a synthesis of inferred powers, each power being inferred to account for the sensation or quality corresponding to it which enters as a constituent member into the group of qualities which we perceive.

The statement of this latter view regarding the nature of the

perceptive process in which the principle of causation is made use of, in addition to the laws of association, brings us to the last important point which we proposed to consider. The nature of the inferred causes of our sensations and their synthesis is a problem which the phenomenalism of Mr. Mill and his school does not touch. And yet it is with this problem that a great deal of modern science has to do. Light, heat, electricity, force, as studied by physicists, are non-phenomenal powers, and the object of science is to ascertain their laws and relations. With this subject we have nothing to do, except to point out that a true psychology must leave a place for it.*

Dr. Jardine does not expressly refer to the, in many respects, admirable, elaborate, but also defective explanation of the belief in the external world given by Mr. Bain in his great work, *The Senses and the Intellect*; but his last remark in this long quotation, in which he speaks of the requirements of a true psychology, taken along with his previous statement that the material world is not altogether independent of our mental activity, indicates, along with a recognition of the elements of truth to be found in Mr. Bain's theory, a perception of its shortcomings and defects. Mr. Bain's explanation of the perception of a material world and of the belief in its independent existence has distinctive merits as exhibiting the right point of view of psychological enquiry and as containing many of the features of a true philosophy; but its demerits are equally conspicuous inasmuch as it fails to provide a rational psychological basis for the assumptions of physical science as to the reality and independent existence of the forces of nature, and also ignores elements of knowledge discoverable by close scrutiny of the human mind which will account for the popular belief and go far to justify it. Like all earnest men who have a thorough conviction of the soundness and importance of their opinions, Mr. Bain avails himself of every suitable opportunity of pressing them, both in their positive and negative aspects, upon the attention of his readers. His psychological views, ever and again, crop up in his treatise on Logic, and it is in this latter work we find a clear and concise statement of his matured opinion on the supposed independent existence of a material world which will serve to set off Dr. Jardine's theory in its two-fold relation to the associational school on one hand and to the intuitive school on the other.

Speaking of the existence of hypothesis in psychology, and instancing perception as a case in point, he says: "On this subject, there prevails the assumption of an independent

* Jardine's *Psychology*, pp. 141-147

"material world and a series of independent minds brought into mutual contact; an assumption that has the great recommendation of easily and simply expressing all the common phenomena. It has, however, the serious drawback of being self-contradictory; whereas the view that avoids the contradiction is lumbering and unmanageable in its application to express the facts, and hence the backwardness to receive it as a substitute for the other. This is an extreme case of a hypothesis believed solely because it squares with the appearances. Not only is there an absence of proof otherwise, but there is flagrant self-contradiction, which ought to be considered as a complete *disproof*."*

The fault lies not so much in what is asserted as to these *assumptions*, as in what is left unsaid. The sin is one more of omission than commission; and yet Mr. Bain's emphatic language is misleading. The *disproof* of the view he combats does not prove his own view to be correct; for his appreciation of the possible alternatives is not exhaustive. We conceive that Dr. Jardine, on his own interpretation, would experience little difficulty in going along with Mr. Bain in his denial of the existence of an independent world; but the question would arise, what does Mr. Bain mean to assert by this denial? Is he denying a total complete independence, and *therefore asserting* a total and complete dependence? Does Mr. Bain intend to imply that the material world in *all* its aspects and elements as cognized by the human mind is *entirely* dependent for its existence upon consciousness, or that to some extent and *partially* it is the creation of the consciousness? We conceive that Dr. Jardine would demur to the former alternative and adduce excellent reasons for his demurrer, while the latter he would unhesitatingly endorse. The idea of existence apart from its being perceived indicates a stand-point which every psychologist would disown, but Mr. Bain's emphasizing of this point does not advance him much in his attempted proof that the material world, as perceived, is not perceived as being in *some* of its elements independent of the perception. Dr. Jardine, if we do not misinterpret him, maintains the material world to be both dependent and independent.

Mr. Bain sums up his elaborate investigation of the perception and belief of a material world in the following words: "So, instead of looking upon the doctrine of an external world as a generalization or abstraction grounded on our particular experiences, summoning up the past and predicting the future, we have got into the way of maintaining the abstraction to be an independent reality, the foundation, or cause, or origin of all those experiences."†

* Bain's *Inductive Logic*, p. 285. † *Senses and Intellect*, p. 382.

"We have got into the way of maintaining the abstraction to be an independent reality!" We do not think that we have done anything of the kind. Abstractions are things that philosophers have much to do with, and it is they who are answerable for the fault of substantivising abstractions, not others. It is Mr. Bain himself who endeavours to prove that the world is an abstraction, and then, gratuitously crediting people generally with the perception of nothing but an abstraction, accuses them of having blunderingly "*got into the way*" of turning this abstraction into a reality. He says: "This leads us to generalize sensation still more, and to form to ourselves an *abstraction* that comprehends all our experience, past and present, and all the experience of others; which abstraction is the utmost that our minds can attain to respecting an external and material world." "The mistake is, supposing the abstractions of the mind to have a separate and independent existence."* Abstractions have no *separate* existence, but still they have an existence in the objects perceived from which they are abstracted. If objects possessing material qualities are not perceived, these material qualities cannot, as Dr. Jardine truly remarks, be abstracted; and if the actual undeniable contents of the belief in a material world are not elements, in some form or other, in the objects of perception, abstraction will not account for their existence.

Passing by, then, this notion of an abstraction, as an unsatisfactory account of the real character of the belief under investigation, Mr. Bain's language is certainly curious, "We have got into the way." We certainly have got into the way of believing the world to have an existence independent of our perception of it, and the question naturally presents itself, could we help getting into this way? The conviction gathers strength with the development of the human mind and, long before it is capable of forming abstractions, or is amenable to the abstruse arguments of metaphysicians, is matured and ineradicably rooted. And if our having got into this way is, as Mr. H. Spencer argues, the result of accumulated experience transmitted from generation to generation, it is plain that we have advanced so far in this way that it is extremely improbable that we shall ever retrace our steps. The invincible obstinacy with which people cling to this belief is a sore trial to philosophers of the school to which Mr. Bain belongs, and indicates that he is committed to a hopeless undertaking.

But then the further question will be suggested, is the way into which we have got, a wrong way after all? May it not be that the mistake is on Mr. Bain's part? If his view is partial and one-sided, if in his explication he has failed to recognize

* *Senses and Intellect*, pp. 380-381.

and take into account in his calculation *all* the elements revealed in human consciousness, it is not very wonderful that the result arrived at should not harmonize with facts.

Now Dr. Jardine's point of departure is practically identical with Mr. Bain's, and truly psychological, and both build up the belief of a material world out of elements given in sensational consciousness; but the divergence commences in the estimate of the amount and quality of the objective elements of this consciousness, and every advance in the synthetical development of cognition widens the difference. But still Dr. Jardine occupies an intermediate position between the two rival schools as they are popularly conceived. He holds so far with the *results* reached by the associational school as to agree with them that the world is partly not independent of the knowing mind; and his recognition of the elements of truth, incomplete and partial, but still truth, in their theory on this point, is a very great help to the student to perceive where the theory halts, and in what way errors creep in. While on the other side, by taking the philosophical point of view and rejecting the prior assumption of the existence of two independent substances, mind and matter, he carefully, in the spirit and method of a right psychology, traces out the elements, process and products of cognition, and in the end justifies the belief in natural realism. We think this portion of the treatise is specially valuable, as the subject with which it deals is, in the last degree, important. Written in an uncontroversial spirit, being the product of full, accurate and digested learning, and dealing with topics, which are now somewhat hotly discussed, in a simple, lucid, masterly way, the book is a very meritorious work, and will, when it is carefully revised, and the marks of hasty composition obliterated, do excellent service in indoctrinating our University students with enlightened and sound opinions on some of the vexed questions of psychology, and also on an extensive scale, if, as we hope it will be, the treatise is adopted by the Governing Body of the Calcutta University as one of its text-books for the B.A. Examination.

We had marked many passages in the author's explications of the processes and products of representation and thought, which we should have desired to quote or comment upon, but the undue length to which this notice has already run precludes our doing so. Sufficient that the rest of the work is of the same high character as the beginning, distinguished by the same qualities of full information, clearness and depth of thinking, and simple natural style.

Our remarks have shewn that we conceive the work, excellent as it is, to be capable of improvement; and in this direction Dr. Jardine may have a clearer perception of what is required than we possess.

322 *The Elements of the Psychology of Cognition.*

Our only desire is, that this edition may be speedily sold off, in order that the author may avail himself of the call for a *second* edition to enrich the book with a copious index, and such other modifications, enlargements, references, as, whether suggested to him or not, commend themselves to his judgment.

With Mr. Bain's belief of a material world out of elements given in consciousness; but the divergent opinions in the estimate of the amount and quality of the objective elements of this consciousness, and every advance in the systematic development of cognition widens the difference. But still Dr. J. Bain occupies an intermediate position between the two rival schools as they are popularly conceived. He holds as far with the results reached by the associational school as to agree with them that the world is partly not independent of the knowing mind; and his recognition of the elements of truth, incomplete and partial, but still truth, in their theory on this point, is a very great help to the student to perceive where the theory fails, and in what way errors creep in. While on the other side, by taking the philosophical point of view and rejecting the prior assumptions of the existence of two independent substances, mind and matter, he carefully, in the spirit and method of a right psychology, traces out the elements, process and products of cognition, and in the end justifies the belief in natural realism. We think this portion of the treatise is especially valuable, as the subject with which it deals is, in the last degree, important. Written in an uncontroversial spirit, being the product of full, accurate and digested learning, and dealing with topics which are now somewhat hotly discussed, in a simple, lucid, masterly way, the book is a very meritorious work, and will, when it is carefully revised, and the marks of hasty composition obliterated, do excellent service in indoctrinating our University students with enlightened and sound opinions on some of the vexed questions of psychology, and also on an extensive scale, as we hope it will be, the treatise is adopted by the Governing Body of the Ontario University as one of its text-books for the first examination.

We had marked many passages in the author's explanations of the process and products of representation and thought, which we should have desired to quote or comment upon, but the undue length to which this notice has already run precludes our doing so. Suffice it that the rest of the work is of the same high character as the beginning, distinguished by the same qualities of full information, clearness and depth of thinking, and simple natural style. Our remarks have shown that we conceive the work excellent as it is to be capable of improvement; and in this direction Dr. J. Bain may have a clearer perception of what is required than we possess.

ART. V.—THE LOST RIVER OF THE INDIAN DESERT.

A COMMENT:—BY NEARCHUS.

THE writer in the *Calcutta Review* of July last, who published "Notes on the Lost River of the Indian Desert," and who tried to establish the proposition, that the River Satlej was *not* one of the five rivers of the Panjáb of the ancient geographers, has failed to prove his position. This is the opinion of some who dwell in the desert, and who are interested in the historical search for the lost river.

The reviewer's proposition is, that the five rivers were—1 the Indus (Sindh) ; 2, the Jhelam (Hydaspes) ; 3, Chenáb (Acesines) ; 4, the Rávi (Hydraotes) ; 5, Báyás (Hyphasis). That the Chenáb carried down the united waters of the last four streams, to join the Indus (Mehran). That the Indus was known as the Panjnad (five rivers) from the point of confluence to Aror near Rori-Bukhar. Whilst the Satlej (Zaradrus vel Hesudrus) was a great stream by itself which ran eastward, between the Báyás and Jamna. Its course was through the Marastháli (Region of Death) down to the Rann of Kach. The reviewer supports his theorem by a train of arguments which *hinge* upon one period, *viz.*, the *thirteenth century*. To this period he traces the drying-up of the Sótra or Hakrá, which calamity was *the cause* of the downfall of the Sumra dynasty over the lands of Kádál, which was succeeded by the Summas. There are three great points, then, on which this proposition rests and which have to be disproved. The writer seems to me "to base positive conclusions *too often* on merely negative data" as Hugh Miller complained was frequently done in the geological field. I shall endeavour to controvert his arguments *seriatim*, and shall try to arrive at a truer conclusion concerning the river that flowed in old times in the great Indian desert.

1st.—I have to demonstrate that the Satlej (Satadru) did *not* flow out of its present course. But was running to the westward, *anterior* to the thirteenth century.

2nd.—That the lost river (the Sótra or Hakrá) *did not reach the sea*, but ended its course in the old Indus, near Rori.

3rd.—That the overthrow of the Sumras, and the succession of the Summas, in the "lands of Nair and Kádál" did *not* occur in the thirteenth century.

With regard to "the lands of Nair and Kádál," the Ramala of the Arab geographers. This tract is now known as the Bánger, or highland, intermediate between the desert proper, and

the existing river valleys. There is no doubt "of the local traditions which ascribe the desolation of this once "flourishing country to the drying-up of the stream by which it was fertilised."

The *depression* called the Hakrá is traced along the eastern limit of the Bánger. It is a broad, rather shallow channel running in even lines, which bifurcates at latitude 22'27", longitude 72'15." One limb proceeds westward, the other is continued southward. The Hakrá bed is not at all like the eroded valley of a great erratic river, such as the Satlej. And it was passed *unnoticed* by that great observer Elphinstone when he crossed the desert in 1808. The Baháwálpúr Irrigation Survey of 1869 determined its level to be *thirty feet higher* than the bed of the Satlej, at a point below Ballur (see sketch). The Superintendant of Irrigation "calculates that it could take down *half* the volume of water of the Satlej in flood." And he reports that "from the surface, down to spring-water level, there is *no appearance* in this locality of the characteristic alluvial deposit of the Panjáb rivers."

These are surely physical features of considerable importance in antagonism to the reviewer's theory! I shall now undertake to place the reviewer's views, and my own, in contrast on each successive point.

* From the Himalaya the fertilising waters came, and some of the tributary streams of the lost river are *still running*. But the dry bed of a large river *began only at Bullar* in "latitude 29'10," or, more than two hundred miles *distánt* from the Siwalik hills. At Bullar the numerous affluents united by means of two great arms.

It can be demonstrated that the Narra was directly continuous with the ancient course of the Indus, *above Bukhar*, whilst the Hakrá came from the east and joined the Narra, or old Indus, at an angle of about 50° (see Cunningham's map IX), and that *it ended its course there*, down to the eighth century. General Cunningham (page) 221 writes: "In the time of Timur and Akbar, the junction of the Chenáb and Indus took place opposite Uch, 60 miles above the present confluence at Mithankot." He then shows that the Indus "gradually changed its course, and *early in the present century* left the old channel at 20 miles

* The dry bed of a large river may still be traced from near the Himalaya through Bhattiana, Bikanir and Bhawalpur into Sindh, and *thence onwards* to the Rann of Kach (Runn of Cutch). The course of the river is correctly laid down in General Cunningham's Ancient geography of India to

lat. 27'55" long. 69'56", at which point instead of joining the Indus above Bukhar, the river is *said* to have turned southward and then westward, where its bed became continuous with the old channel generally known as Narra or Nala, which is to be traced "onward to the Runn of Kach."

above Uch, until it rejoined the old channel at Mithankot." Taking up this clue, the old channel of the Indus, called the Nálá Púrán, has been traced on the right bank of the Chenáb near Sultan-ke-Shahr. Opposite to this point, it re-appears on the left bank of the Satlej (Ghará) in the Baháwalpur territory, near the village of Baháwalpur Galúwálá. It is here *well known* as the Trúkari. The channel of the Trúkari passes S.E. of Uch, where the descendants of two saints of Bokhara and Bagdad have dwelt for over seven centuries. The Mákhúm shows a salvadora grove which sprung up on the edge of the old river from a tooth-brush of that wood, which an ancestor stuck into the bank! The channel is known here as Hassan Dariá, it is very wide and was filled with Satlej water, from a spill in the great flood of 1871—*which extended for nearly one hundred miles*. Current tradition identifies the Trúkari with the old Indus. From Uch to Khanpore it runs S.W. thence to Naushera W.S.W., where it is known as Gorállá. Onward to Subsulkot, along Alexander's route (see Cunningham, page 253) where exists, at the *very place indicated* by Masson, a considerable mound called "Sevarae," which is supposed to be the site upon which, "according to Arrian, Alexander built another city, on leaving the confluence of the Panjáb rivers, when he sailed down the Indus to the realm of the Sogdi."

"The Sogdi or Sodroë are identified by Cunningham (page 254) with the Sodas," the people of Seorai. "It is 96 miles in a direct line below Uch "and 85 miles above Aror. By water, the distance would be, at least, one-third greater," or, not less than 120 miles, which would agree with the statement of Curtius, that Alexander reached the place on the fourth day!" The earliest record of this place is found in the Chachnámá, where "Rai Sahasi II remitted the taxes of his subjects on condition that they should raise (or repair) the earthwork of six forts, *viz.*, Uch, Matela, Seorai, Mad (or Man) Alor and Siwistan" in the eighth century. The old bed of the Indus (Trúkari or Darháká) passes under the west side of the ancient mound. Thence into Upper Sindh the channel is traced, until north-east of Rori it changes its name and is called the Narra, which was the old bed of the Indus (see Cunningham, map IX.) The old bed of the Indus from above Uch to Naushera, or about 100 miles, is shewn in the Revenue Survey map of 1873. And its *lower* course, from above Subsulkot to the Narra, was traced in 1852 by the officers who conducted the survey of the Eastern Narra, *vide* reports by Lieutenant (now Colonel) Fife, R.E., and others. The former wrote, "that the supply of water it receives sometimes leaves the Indus 100 miles higher up the country and reaches the Narra by means of a *depression*." Another officer supplies a sketch, which shows that "the Narra branches off from the Indus, near the

village of Ghosepoor" (above Subsulkot). "The bed of the Narra is said there to be in places a hundred and twenty miles broad, and in that part it bears the name of Turkurée, only taking the name of Narra at a spot much lower down." The Hakrá is called *Ráinee* in the sketches of this survey. The name appears higher up, in the course of one of its feeders, above Sirsa. The Hakrá is treated in these reports as a *drainage depression*, "coming from the east which joins the Gorilla or Turkarée near the head of the Narra."

The Trúkari and the Narra are thus identified as the bed of the old Indus, from Uch to Rori. The Hakrá (Ráini) ended its course in the Narra, and did not reach the Rann of Kach, which is 300 miles further down! Thus verifying the tradition recorded by Todd and others, that the Caggar, Sótrá, or Hakrá, "emptied itself into the Indus between Rori Bakher and Utch." Its western limb had a shorter course (see sketch.)

*According to the above exposition, the track of the lost river has been cut short by *three hundred miles!* In consequence so large a volume of water as the Satlej conveys, would not be needed to carry the stream about two hundred miles only from Bullar to Rori. Masson noted in 1826, when describing the fortress of Phulra, that "on the north side the walls were washed by a large expanse of water." The drainage of the *few surviving tributaries* of the Hakrá are still capable, after heavy rain, *not only* of reaching the point alluded to, but of producing a running stream which fills the western channel for a long distance below the bifurcation. *Only the Western limb of the Hakrá extends to the Narra (see sketch).*

The lower drainage of the great tract, north-west from Hissar, Bikanir, and Jesalmer was also considerable. The rainfall over this tract must have been great in ancient times, especially when the "lands of Nair and Khadal" were irrigated and covered with vegetation.

From the following passage in the Mahábhárata quoted by Cunningham (page 331), we may infer that "the meteorological conditions of the nursery of the Braham race" were far more favourable for humidity then, than at the present time. He says, "the great lake of Kurúkshetrá between the Saraswatí and Dris-

* The reviewer states that the waters of all the streams combined, which come from this part of the Siwalik range, between the Satlej and Jamna valleys, could never, under any imaginable circumstances, have maintained a permanent river of such magnitude as the Hakrá for a distance of more than 500 miles

beyond the farthest point to which they reach at the time of their greatest floods.

"The sources of these tributaries being in the outer Himalayan range, they are fed by rain only, and not by melting snows, as are all the large rivers of Northern India."

hadwatí rivers, was an oblong sheet of water 3,546 feet in length from east to west, and 1,900 feet in breadth; other tanks are also mentioned, and these collections of water, we must suppose, were only drainage reservoirs fed from the outer hills and denoting a higher rainfall in the Siwalik range. Add to all this, a permanent feeder from a neighbouring large river, such as the Jamna on the east, or the Satlej on the west, and the stream of the desert would need no further help to run its even course of 200 miles into the Indus. The channel bifurcates, as already shown, and only half the volume of water that escaped from the hills, would be equal to complete its course. *Primâ facie*, there is nothing to indicate, that so powerful a current as the Satlej in flood, ever flowed over the Bânger tract. There are no signs of extensive erosion, *no river silt has been found, down to spring-water level*. The desert stream flowed evenly along, and the theory that the Satlej ever wandered over this tract is utterly untenable.

A glance at the Topographical Revenue Survey Map of 1867 will show the *close proximity* of the heads of the Saraswati and Chitrang to the Jamna, *within the Siwaliks*. And a chapter called Banpurb in the Mahâbhârât mentions the meeting of the Saraswati with the Jamna, at some distance from its course in the hills called Kâlinâ. It occurs where Narudmuni is preaching to Rajah Yudishter and his four brothers, on the uses of the Teerâths, or bathing places. *This establishes the supply from the Jamna*, and it also explains the reviewer's statement "that the Saraswati formerly flowed one hundred miles further than at present," also, that "it may have flowed still further south and joined the Chitrang." The lost river, undoubtedly, received a feeder from the west, at some period, which came from the Satlej, by the channel of the Naiwal, and when the two great rivers (the Jamna and Satlej) had cut their waterway permanently in their respective valleys, they withdrew their supply *and the river was lost*.

* There is much to confuse the reader in this passage. It is true that all the channels that pass down *east of Sirhind*, unite to form the eastern, or Bhatnair arm of the Hakrá. But strictly speaking, none of these "diverge from the direction of the point at which the Satlej leaves the hill." One or two diverge from the

*" Between the Saraswati and the Hakrá. All *diverge from the direction of the point at which the Satlej leaves the hills*. Most of these are Garrah (Satlej) is a series of broad channels, most of them a mile or more in width, of which those to the west terminate in the valley of the latter river, while those towards the east, *which are the most ancient*, are continuous with the Sôtra or of that stream,"

bay north-east of Rupar, whose drainage enters the Satlej valley. But the sources of all these eastern streams are *in the outer or Siwalik range*. Those channels which pass to the *west of Sirhind* belong to the valley of the Satlej, and these certainly do *not* diverge from the point at Rupar.

They are the two Naiwals and the Dhund-i-Daria, and they are given out after the *river has passed the turning point* and has proceeded for a *long distance to the westward*. The Dhand-i-Daria *alone* terminates in the valley of the Satlej. It begins and ends in an old bed, whose lower course will be referred to further on. The "series of broad channels" is therefore divided in a peculiar manner, east and west of Sirhind. Let us consider them, not according to a theory, but as nature has placed them. Those on the west, come from the Satlej and flow westward. The direction of these streams is determined by the watershed of the country, *the crest of which slopes upward, from Umballa towards Rupar*. Sirhind is 21 miles *below* Rupar. There is a deep bay in the hills, north-east of Rupar, where the Satlej leaves the hills. The remarkable feature here is, *the abrupt turn to the westward*, which the river takes at Rupar in *which direction it proceeds for a long course* of about 120 miles, near the base of the hills. Several short drainage channels coming from the north-east, for a distance of 18 miles, pass across the bay, and run into the Satlej valley to the westward, plainly *showing the natural fall of the country* (see Topographical Revenue Survey map of 1867 based on the great triangulation.)

The Naiwal channels, undoubtedly, supplied the left, or, western arm of the Hakrá from the Satlej. The Western Naiwal has been traced by the Baháwálpúr Irrigation Survey of 1869 up to Middan, about 130 miles below Rupar. The Eastern Naiwal has been traced up to a point near Lúddianah, about 30 miles west of Rupar. These channel heads were given out, alternately, long after the river had *passed the point* where it *leaves the hills*. It follows then, that they were *spills*, which took the slope of the country and ultimately flowed in a *southerly direction*, and when the old river had *cut a deeper waterway for itself*, these spills dried up.

There is no evidence that any physical obstruction *ever existed* to prevent the Satlej from flowing directly to the westward by Rupar, whilst the presence of the old river bed, ending in the old Indus just alluded to, supplies a feature of practical geography to support the belief that the *natural course of the mighty Satlej was always to the westward*. The reviewer observes, "*it cuts deeply into its bed, especially where it first leaves the hills*" and it would, in consequence, be *most unlikely* to be diverted at this point. If the river had ever flowed straight over the

crest in a southerly direction, what reason can be offered for the remarkable change in its course from one point of the compass to another? It is not enough to say, "that a tendency to change their course is observed in most of the Panjáb rivers." This will account for the movement of the current over the plains. But not *even* the "curse of Puran" can be received as an appreciable reason for the quick and decided sweep to the west that the Satlej takes immediately on issuing from the hills. It ought to be considered therefore, that the permanent physical conditions which direct its course *are unalterable*, save by a geological disturbance. Nor can it be advanced that a disturbance of this nature has occurred to turn the stream, since the localities are historically too well known—and the *surviving* tributaries of the lost river are still running in their old direction.

The writer here mistakes the eastern for the western Naiwal.

*The eastern channel was, no doubt, traced near Urkara, although effaced for 100 miles lower down. But he is not aware that the western most channel known as Naiwal has since been traced by the Baháwálpúr Irrigation Survey of 1869 up to "near Middah," or about 58 miles *below* the confluence of Satlej and Biyás, a minor branch of this channel is obliterated. The distance below Rupar (about 160 miles) at which the westernmost Naiwal begins, shows that the old Satlej was a *continuous stream*. The head of this channel is only obliterated for nineteen miles. But this effacement at the head indicates, that it did *not* "cut deeply into its bed,"—and it was, probably, only an *inundation spill*.

†Abohar is on the Western, not the Eastern Naiwal. It is on the small obliterated branch above noticed.

The point where the two Naiwals meet is more correctly, in latitude $30^{\circ} 10''$, longitude $74^{\circ} 10''$. The Eastern Naiwal is not traceable for more than 43 miles *above* Kurrulwala—it points towards Urkara. But its head from the old Satlej is also obliterated for several miles, showing that this channel, too, did *not* "cut deeply into its bed,"—and that it was only filled by overflow.

* "Of the channels continuous with the Hakrá, the westernmost, which is known as Naiwal, was found by Lieutenant Hodgson, R.E., in 1847 to be clearly defined at the village of Urkara, about 20 miles south-west of Ludianah, and half that distance from the old left bank of the present Satlej. It has since been traced some miles further towards the north-east."

† "From Urkura the Naiwal may be traced in a south-westerly direction to Abohar, which is situated upon its bank, and thence to Kurrulwala in latitude, $29^{\circ} 53''$ longitude $73^{\circ} 53''$, where it is joined by another similar river-bed from the eastward which bears the same name. The people of the country assert that each of these in turn was the bed of the Satlej."

* It has been explained that *none* of the channels west of Sirhind diverged from the *same point*. The "most westerly arm of the Hakra" leaves the old Satlej one hundred and sixty miles *below the point of divergences*, whilst the easternmost of the old beds of the Satlej, the Dhund-i-Daria, had its head *one hundred miles higher up*, not in the Biyas valley, but in the old Satlej above Ludianah. How, then, is the order of precedence to be judged. Both came from the old Satlej, a long way *past the point of divergence*, one terminates in the Satlej valley which has been traced into the Indus, the other flowing at almost a right angle, "is continuous with the Hakra. The conclusion is irresistible that when both these channels were given out, the Satlej was flowing westward *into the Indus*. Yet the Naiwal fed the Hakra, which, therefore, was flowing contemporaneously with the Satlej. Is this not sufficient proof that the Satlej and the Hakra were *two distinct streams*?

† Neither the Topographical Revenue Survey of 1867, nor the Bahawalpur Irrigation Survey of 1869, show an existing channel at Bhatinda. But two obliterated channels from the south-west appear to have converged upon this point—the easternmost of which looks up towards Urkara. The channel mentioned by Mr. Davidson is in the line of Mirza Kundas Canal, which came also *west of Sirhind* (see Topographical Map above named.)

‡ The Naiwal flowed west of Sirhind and "became continuous with the western arm of the Hakra." It is a mistake to convey it *also* into the *eastern* branch, which was fed by a dozen streams all flowing *east of Sirhind*, and having their source in the *outer Himalayan range* as previously specified. If the channels on either side of Sirhind are treated as belonging to

* "Thus the most westerly arm of the Hakra and the easternmost of the old beds of the Satlej, traceable to the Biyas valley, are still definable to within 5 or 6 miles of each other. There can be no doubt that these deserted channels *diverged in succession from the same point*, and that although they separate so widely, the same stream at different times flowed in each of them. The western branch of the Naiwal then deserted by the stream, was the last of these channels connected with the Hakra, which, therefore, finally ceased to flow."

† "The celebrated fortress of Bhatinda is situated upon the Naiwal last mentioned. This is, no doubt, the river-bed referred to by Mr.

Davidson in 1851, as extending from the southward of Macherwara to near Tatwandi (50 miles north of Bhatinda) and thence onwards south-west."

‡ "At Kurrulwala, where these two channels of the Naiwal unite, they become continuous with the western arm of the Sotra or Hakra which, passing on to Bullar, there joins the eastern or Bhatnair branch. This, a still older course of the river, is formed by the junction of several broad channels known as Naiwal, War or Wah, Purana Daria or Gaggar, Chitrag, &c."

"Each of the first three of these is said to have been in turn the bed of the Satlej."

two separate river systems, the elucidation will be much simplified.

The Wah belongs to the eastern arm. It came from the "outer hills" and was utilized as a canal by Firuz Shah in the fourteenth century by means of "a great cutting." Its head is in the direction of the north-eastern part of the bay at Rupar, which is traversed by short affluents of the Satlej. The Purána Dariá or Gaggar, the reviewer says elsewhere, "rises in the outer range and joined the Hakrá as a tributary." How then can it be said to have been a bed of the Satlej? The Gaggar once flowed down to Bhatnair and survives to attest its own independent source. Perhaps, it was formerly fed by the Chorra, whose head also leads up to the cross-feeders of the Satlej, which come from the north-east and traverse the bay at Rupar. And, perhaps, these cross-feeders were of larger volume in ancient times, when the Chorra and Wah were flowing.

* We have analysed the reasons upon which this conclusion is founded. We have found that the lost river did *not reach the sea*, and in consequence that the great volume of the Satlej could not have found waterway in the Hakrá bed. The channel of the Naiwals, which was the only tangible proof adduced, has been satisfactorily accounted for. While to oppose to this view, we have Cunningham's ancient geography of India, showing the Map of India in the seventh century, based upon reliable information to attest the westerly course of the Satlej at that early period. The political divisions in that map were defined by the Chinese pilgrim, Hwen-Thsang, whose accuracy in geographical details is acknowledged to be remarkable. Upon his information, the Satlej is given as the *northern* and *western* limits of a district (Cunningham, page 144) named "She-to-tu-lo, or, Satadru which was bounded on "the west by a *great river*, which can only be the Satlej or Satadru." Certainly, we may consider that the great pilgrim could not have so designated the Báyás, while the identity of the name of both district and river, carries conviction. Cunningham observes, (page 217) "The famous spot on the eastern bank of the "Hyphasis where Alexander halted and wept† must have been "somewhere in the *low ground* between the Satlej and the Báyás, "at a short distance above the old junction opposite Kasur and "Baridpur. For twenty miles above this point, the *courses of the* "two rivers ran almost parallel and within a few miles of each "other, from the earliest times down to A.D. 1796, when the

* "There can be no doubt that the Satlej, instead of turning nearly due west from Rupar to join the Báyás as at present, originally flowed in a much more southerly direction, and that the Sótra or Hakrá is its ancient bed."
† Gibbon. Decline and Fall of the Roma Empire.

"Satiej suddenly changed its course and joined the Báyás above "Hari-ki-patan." Further in proof of the early geographical position of the river, Cunningham mentions (page 214) that "old coins, "which are found in great numbers, show that Depálpúr was in "existence as early as the time of the Indo-Scythians. I am "inclined, therefore, to identify it with the Daidala of Ptolemy, "which was on the Satlej to the south of Labokla (Lahor)."

I must now proceed to trace the *old Satlej* which has been before alluded to. After the course of the *old Indus* above Uch had been traced, it became clear that the Satlej or Gáhrá *could not originally* have joined the Chenáb, *which ended its own course so much higher up the country.* My attention was, therefore, first directed to the *lower Satlej.* Enquiry at Uch, elicited the fact that the Gáhrá had not been known near there, until the time of Hazrat Bandagí Mahomed Ghose in A.H. 925 (A.D. 1526.) He was an ancestor of the Makhdúm of Uch. The tradition in the family recounts three subsequent fluctuations of the river before it settled in its present course. An old channel some 20 miles to the south-east was then heard of called the Badar, this was traced upward, until it was connected with a well-known tortuous deep dry channel, called the Triwáná. It begins at lat. $30^{\circ} 10''$ Long. $73^{\circ} 80''$ and is paralled with the *Satiej for over 100 miles.* The Triwana is shown in the last Revenue Survey Map of 1870 from the Sirsa district, where it is called Phatpak* which seems to be continuous with the old channel above Ferozepore and Ludianah to Rupar. The Triwáná or Hariárl is traced down to the Gegrá at Khairpur. Below this, it is called the Chil and enters the Wahind, a considerable depression near Dera Báká. The course of the channel onward is well-known as boats used to pass down it within the present century. It passes south of Baháwálpúr station to Jáhír Pír and Derá Masti, then S.S.W. between Nurpur and Lahak, turning south-east of Ahmedpur, known as the Bádár, until it enters the Trúkarí below Got-Channi. Two channels of a *later date*, below Derá Masti, have been found *to the westward* of the Wahind. Both these also end *in the Trúkarí*, which agrees with the tradition current along the Triwáná. And the Trúkarí, we have seen, *was the old Indus!* The old Satlej, therefore, did *not join the Chenáb*, like the modern river. And the Arab conqueror in the eighth century, who marched up from Arór to Múltan, would not have to cross it. This explains some of the *historical omissions* pointed out by the reviewer. This also explains why some geographers of the middle ages did not apply the term "Panjnad" (five rivers) to the Chenáb, which it

* A large channel called Sótra nearly forty miles south of Triwáná leaves the Phatpak and runs in parallel with it.

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received in *later* times. There is no tradition to indicate the period that the Satlej occupied the Tríwáná and Wahind. But it is older than the channel near Pakpatan, which is on the *north side* of the present stream, and was the principal ferry at that point in the thirteenth century. There are two ancient mounds on the old river bank, of which no traditions remain. One is called Múnda Shahíd (Mahomed the Martyr). This hillock was taken possession of by the Mahomedans—it holds a shrine, and is covered with graves. The other mound is known as Tibbú Raĩ-ká (the place of the ruler.) It is situated above 50 miles north-east of Baháwálpúr. This mound has been excavated to the depth of thirty-five feet. A foundation wall of large sun-dried bricks has been found at 32 feet below the surface. Other walls of fire-burnt bricks were found just below the surface and extending to fifteen feet. These walls indicate builders who lived at periods remote from each other. The chief feature of the place is a large pit, seventy feet in diameter and eight feet deep, dug out of the highest point of the mound, which is filled with *calcined human bones*. Was this one of the *high places of Baal*? And were the original inhabitants of "Raĩká" given to practise human sacrifices? The presence of the pit full of sacrificial remains together with the known antiquity of the mound seem to confirm this view. The first dwellers on Raika were most likely Scythians, who brought with them the worship of Baal, the sun or fire god, from the banks of the Oxus. The Indo-Scythians were in possession of lower Sindh two centuries B. C., and according to General Cunningham "they occupied the Panjab and Scinde and were in full possession of the Indus valley down to the seventh century." The Political Agent at Baháwálpúr in his annual report observes: "Below the ruins there is a depression which was most probably the main stream of the Satlej when this town was inhabited." This was written before the old Satlej was traced into the old Indus. It is a fair inference, therefore, that this was the course of the river *anterior* to the thirteenth century, that is, at the *very time* that the reviewer supposed it to be flowing in the Hakrá bed!

* No less an authority than Elphinstone† identifies the Gaggar as the Drishadwatí of the Mahábhárata. The Gaggar was one of the main affluents of the lost river and it originally extended to Bhatnair. The five rivers so often named, were the existing

* "The foregoing accounts for the absence of all mention in the Vedas or Mahábhárata of any such river as the Gaggar, or, indeed, of any important stream between the Satadru (Satlej) and the Saraswati. Of the five streams so frequently named, between the Indus and the sacred stream, the Satadru is always alluded to as nearest to the latter." † Book IV, page 225.

five, of which the Satlej was one. It was *always* nearest to the Saraswati, as it is now. The Gaggar was not mentioned because it was *not* a "flowing river" like the Saraswati, which was fed by snows from the Jamna.

* This reads like self-contradiction. The writer previously stated "that the sacred stream is said to have lost itself in the sands in the time of Manu, while the *Hakrá* was flowing in the *thirteenth century*." This was written to argue that the *Hakrá* was flowing for centuries *after the Saraswati had ceased to flow*, while now he argues that the *Saraswati continued to flow* until the Satlej left the *Hakrá* bed. He has assured us that "some authorities have been led to consider that the *Saraswati* at one period filled the *Hakrá* bed." We now know that this was effected by its connexion with the Jamna, the tradition of which is *still preserved* in the desert.

† One of the chief affluents of the *Hakrá* is called Chitrang or Sotra. A stream higher up is called Motak Sotree, which appears to be a feeder of the Chitrang, hence the name!

The name Sotra is applied exclusively to the eastern or Bhatnair arm. The Sotra or Chitrang was one of the "several torrents" into which Firoz Tuglak, King of Delhi, A.D. 1351, diverted water from the Jamna. He did the same from the Satlej, or from the affluents of the Satlej, in the Bay at Rupar. Man only imitates Nature. It is probable, therefore, that the Chitrang and Jamna were once naturally connected. While some of the smaller gold producing affluents of the Satlej (noticed by Hwen Thsang) may have been brought down, north-east of Sirhind, to feed a dry channel.

‡ Ted in the "sketch of the Indian Desert" (page 294) says, "The Caggar (Gaggar), which rises in the Siwalik, passes Hansi Hissar and flowed under the walls of Bhatnair, at which place they yet have their wells in its bed." This is confirmed by practical geography, Bhatnair being *above* the union of the Sotra or Chitrang with the other channels. The name Sotra, therefore, is only applied to the eastern arm of the *Hakrá* *below* Bhatnair.

§ The channels of the Naiwal are entirely silted up and obliterated.

* "The disappearance of the *Saraswati* is readily explained by the changes just alluded to, for that river no longer able to reach the (*supposed*) Satlej which had forsaken its ancient course, necessarily lost itself in the sands of the deserted channel, until in later times it joined the Gaggar above Munak."

† "The upper part of the *Hakrá* is called Sotra or Sutra, which is *probably* a corruption of Satedra or Sutudri, the old name of the Satlej."

‡ "Tradition asserts that Bhatnair was re-built in S. 1102, A.D. 1045, and that the Sotra then flowed under its walls."

§ "The old beds of the Satlej referred to are more or less obliterated in their upper part by the process of silting-up, which, from the constant abrasion of the mountains, and the very much heavier rainfall, is far more active in the Sub-Himalayan tract than in the dry and level plains."

ated for several miles, in their upper part. But the "abrasion of the mountains" could *never enter* these channels whose heads are in the old Satlej, whilst the present river would intercept the drainage of the outer hills. The obliteration of the upper course of the Naiwals is proof that they were only fed by *overflow*.

* The current of the Satlej was, doubtless, *always* rapid, "especially where it first leaves the hills." And if the Naiwal channels, "so widely separated," had ever borne the current of this river, its erosive action would have cut so deeply, that when abandoned by the waters, their upper part, would not be silted up and obliterated. Especially when we consider, that the Naiwals *ceased to receive any drainage*, when the river left its old bed.

† This is outside the question. "All diverge from the direction of the point at which the Satlej leaves the hills"—and that is the point where we have sought to discover the direction of the changes.

If a fluvial diversion of *so rapid* a character (almost amounting to a *violent geographical disruption*) had ever occurred, such as the reviewer's proposition involves—and calculating at the same rate of movement to the westward, the whole Panjab would at this period be a barren waste!

‡ The tradition preserved in the desert assigns *no date* to the event. It is vague and undefined. In the annals of Bikanir (page 187) Tod refers to "a stanza which dated its deterioration from the drying-up of the Hakrá river, &c." The only date this legendary stanza assigns for the catastrophe. "is the reign of the Soda Prince, Hamir." Again, in the annals of Jessalmer (page 263) "The name of Hamir has been incidentally discovered from the trivial circumstance of an intermarriage related in the Bhatti annals. His contemporary of Jessalmer was Doosauj, who succeeded in S. 1100. A.D. 1044. So that we have a precise date assigned, *supposing this to be the Hamir in question.*"

This is the nearest approach to identify the period of the phenomenon, as will be understood further on.

* "The current of the Satlej is rapid, especially where it first leaves the hills, and the soil through which it flows is light and sandy, the stream has therefore cut deeply into it. Owing to this and to the effects of the silting-up process, the present bed of the river is much below the level of the old channels."

† "The general slope of the country intersected by these old river beds is from north and east towards the south and west, in which direction the

changes referred to have taken place."

‡ "That the lands on the banks of the Hakrá, thus became waste in the first-half of the thirteenth century, is confirmed by the tradition still preserved throughout the course of the lost river, that at this period the country was depopulated by a terrible famine, and that the surviving inhabitants took refuge in the valley of the Indus, the tract then abandoned having ever since been desert."

* Now, when we consider that Sindh was conquered by the Arabs in the eighth century, and that the Mahomedan conquest was maintained subsequently, it becomes a question how a Rajput's dynasty came to be *ruling there* in the thirteenth century? Besides which, this is a sudden shifting of the scene from the "lands of Nair and Kadal" into Sindh! The whole of the writer's story hinges upon one period, *viz.*, the drying-up of the Hakrá in the thirteenth century. And the Hakrá, we have seen, ended in the old Indus in Upper Sindh. We accordingly find in the annals of Bikanir (page 235) that, "Kailan, the elder brother of Talbahon, who was expelled by the Pahoos, was, A.D. 1200, *re-called* and installed at the age of 50 over *the lands of Khadal*. Kailan married into the Samma family of Jam. He possessed himself of all the Samma territory, when the Sindh river became the boundary of his dominions." The deduction is clear that *anterior* to A.D. 1200, the Bhattis had got possession of the territory, they were expelled by the Pahoos, and were re-called. Therefore the Sumras, who *preceded* the Sammas, had passed away *long anterior* to that period. This approximates to Tod's *earlier* date for the disappearance of the Gaggar or Hakrá (A.D. 1044.) The limit of the Samma territory being the Sindh river, agrees with the old course of the Indus traced through the Baháwálpúr State, and explains the old channel under the great mount of Sevarai (already noticed) which Cunningham identifies as the site of a city built by Alexander, in the country of the Sogdi or Sodre—the Sodha Rajputs. We have no need to follow the Sumras and Sammas *after their migration* into the valley of the Indus. Let us confine our enquiries to our proper scene—"the lands on the banks of the Hakrá." We learn in the annals of Bikanir (page 235) that the chief town of the district called Khadal is Derrawal which was founded by Rawal Deoraj in the ninth century. Derrawal or Dilawar is in existence. It is a stronghold in the desert in the possession of the Nawabs of Baháwálpúr. We have seen that Kailan (a Bhatti) was re-called in A. D. 1200 "on the death of Talbahon, who on his return finding his seat usurped, and having in vain expostulated with his traitorous son, proceeded to Khadal, of which Deorawal is the capital, where he was slain with 300 of his followers, in repelling an irruption of the Beloches." This history takes us back into the *preceding century*—during which neither Sumras nor

* The writer of the notes says, "according to the Muntakhab at Jawarikh, Hamir was the last of the Sumra dynasty, which ruled in Sindh and over a considerable portion of the desert of Mara. The Sumras

were a branch of the Soda tribe of Rajputs, and their downfall occurred in the thirteenth century, after the destruction of their lands by the drying-up of the Hakrá."

Sammas were in possession of Khadal. Their rule had disappeared, while Khadal was still flourishing. There was no connexion, therefore, between the downfall of the Sumra dynasty and the drying-up of the Hakrá. The date of that catastrophe remains unknown!

The three important points have now been discussed. Let the reader judge if the reviewer's theory has stood the test!

It remains to me to dispose of some arguments in detail.

* It will be remembered that the Satlej is supposed to have *then* flowed in the Dhund-i-Daria. Cunningham says (page 223) "The Dhand is probably the Dhamuk or Dauk, an old channel of the Satlej, which *in its lower course*, takes the name of Bhatiyári, and passing by Mailsi, Korhor and Lodran joins the present channel just above its confluence with the Chenáb." With regard to the Báyás valley—Cunningham says, "its still existing and well-defined channel joins the Chenáb 20 miles below Shajabád, and *its most southerly point is ten miles distant from the nearest bend of the Bhatiyari.*"

† The period of the *first* junction is unknown. Cunningham writes (page 222), "This junction is mentioned by Jauhar in A.D. 1555 and by Abul Fazl in 1596. But though the confluence of the two rivers near Firuzpur had been long established, yet even at the *latter date* the *waters of the Báyás still continue to flow down their old channel.*"

This fact is also mentioned in the Ain Akbari in the beginning of the seventeenth century. As a matter of fact, the Báyás was confined to its old channel, under its own name, until its final junction in A.D. 1790, "when the Báyás altogether lost its independent course and is now a mere tributary of the Satlej" (Cunningham, page 223.)

In confirmation of this statement, we know of the existence of a Baniás Bandi, in which is recorded the first failure of crops on the banks of the old Báyás, *less than a hundred years ago*. Perhaps the united streams were known as Beyah, *at the place of junction*, but not below it. In proof hereof see Tod's Rajasthan (page 256.) "Kallan ruled 19 years (A.D. 1219.) He built a fort on the Beyah, called after his father Kerroh or Kerore. Kailan was succeeded by Chachick Deo, who made Marote his head-quarters, to cover his territories from the attacks of Múl-

† "The Satlej, when it abandoned the Western Naiwal, entered the valley of the Báyás, and flowed under the highland which formed its eastern boundary." first junction between these rivers and their combined streams were henceforward known as Beyah (Báyás.)

‡ "At this time, therefore (the thirteenth century), took place the application of the name Satlej to the streams below the confluence is a modern innovation, and is not to be found in old writings."

tan, which took umbrage at the return of the *Bhattis* across the *Garrah*."

Here we have the *Biyás* and *Garrah* distinguished as separate rivers at the beginning of the thirteenth century! At the same time that the lands on the *Hakrá* appear to have been flourishing, since *Marot* was still prosperous on its bank.

Later, *Tod* tells us (page 263) "that the territory bordering the *Garrah* was taken by *Daod Khan* (A.D. 1685,) and it became the nucleus of a State called after himself, *Daodpotra*." The *Garrah* is still known as *Satlej* (*Satadru*) at *Pakputan*, in connexion with the legends of *Sheik Farid* of the thirteenth century. The name is therefore not of modern origin. The river is commonly called *Níli*, from the confluence down to lat. 30° long. 73° where the name *Ghara* first appears.

* When the Sultan marched from *Delhi* to the banks of the *Beyah*, the *Satlej* was *flowing in its old bed, wide of Uch*, and was not in his line of march! Instead of being "merged in the *Biyás*," it was flowing *into the Indus*—in its own wide valley. This is an instance of a "positive conclusion" being based on "merely negative data!"

It cannot be known when the *Satlej* joined the *Chenáb*, no more than the date of the first junction with the *Biyás* can be known. But as *Cunningham* gives A.D. 1555 as the earliest recorded date for the latter, and the *Makhdúm Mahomed Ghose* mentioned A.D. 1526 for the former event, we may judge from the closeness of the two periods, that the changes occurred in the sixteenth century.

† By the help of the new light shed upon the subject, we can understand, that when the *Jamna withdrew its supply*, the eastern arm dried up. The drying-up of the eastern arm even a century earlier than the final catastrophe, is at least an argument against the *suddenness* of the calamity, so much insisted on by the writer. When it is known that the eastern arm above *Bullar*, measures three miles half a furlong, while the Western or

* "In the *Tabakat-i-Nasiri*, it is mentioned that in A. H. 643 (A. D. 1245) news arrived of an army of *Mughals* under *Mangu Khan* having reached *Uch*. The Sultan *Alá-ud-din* marched from *Delhi* to drive back the invaders, and when he arrived on the banks of the *Beyah* the infidels raised the siege of *Uch*. Here the allusion is to the united streams. The *Satlej* is not mentioned, although the writer was with the army, that river

having then become merged in the *Beyah*."

† "With regard to the changes which led to the drying-up of the eastern or *Bhatnair* arm of the *Sótra* or *Hakrá*, I have been unable to fix any dates for their occurrence, but it is probable that this channel was abandoned by the stream, at least, a century before the *Hakrá* finally ceased to flow."

Naiwal arm, is only two miles three furlongs in width, it will be admitted that the greater body of water came from the east. The drainage from the *outer hills* is considerable, many of the known channels are a mile wide, but flowing through a level, shallow valley with an easy slope, the torrents cut a broad waterway without any difficulty through the light soil. These channels continued to reach Bullar, until the Satlej from the westward also withdrew its supply, when the Hakrá finally ceased to flow. * The Hyphasis of Alexander ended in the Chenáb twenty miles below Shajabad. "Its still existing and well-defined channel" is quite *eighteen miles distant* from the *present course*, between Múltan and Baháwulpúr !

And about twenty-five miles distant from the old Satlej of Alexander's time, which flowed into the old Indus.

† We now know that the two rivers did meet, at a place south-east of Uch.

In Cunningham's *Ancient Geography of India* (page 217), we learn that Pliny knew of the existence and position of "the Sydrus, that is the Hesidrus or Satlej." Pliny places the limit of Alexander's career "in the territory of the Sudrakas—in *Sudracis expeditio Alexandri termino*." And he places the sacrificial "altars on the opposite bank of the Hyphasis or Báyás river." Also, at page 138, we read : "The expedition of Alexander terminated on the banks of the Hyphasis or Báyás, but he received the submission of Phegelas, or Phegeus, the King of the district *beyond* the river, that is of the Jalandhar Doab," between the Báyás and Satlej. At page 214, "The ancient town of Ajadhan (Pakpatan) is situated on the high bank of the old Satlej. This part of the Doab is still known as Surát-des, a name which recalls the Surakous of Diodorus, and the Sudrak of other Greek writers." At page 244, after Alexander's wound, the march of Perdikkas is traced from the eastward to "the confluence of the rivers," and the Ossadü or "Ossodioi who tendered their allegiance to Alexander" are identified with "the Ajudhya, of which the above is as close a rendering as could be made in Greek characters. Now Johiya is an abbreviation of Jodhiya which is the Sanskrit Yaudheya; and the Johiya Rajputs have occupied both banks of the Satlej from time immemorial."

With reference to Arrian's *omission* of the Satlej. Arrian

* "When the main streams of the two rivers united, the greater body of water took the present more direct course, which, probably, differs little from that of the Hyphasis of Alexander, being to the eastward of most of the old channels."

† "Arrian, Strabo and other classical writers, as well as the Arab geographers omit all mention of the Satlej when describing the tributaries of the Indus. As the two rivers did not meet till they reached the Runn of Kuch, this is sufficiently accounted for."

admits (at page 311) "that he chiefly copies from Ptolemy." He says "nothing certain is related concerning this country, beyond the river Hyphasis, for Alexander penetrated no further." Thus, he has adhered to Alexander's steps, but has not followed the eastward route of Perdikkas. He adds, "many other rivers, which, perhaps, may be longer than these, but unknown to us, may flow through this country." This explains why Arrian did not mention the Hesidrus which was *beyond the river Hyphasis*." At page 191, he discusses the relative magnitude, from hearsay, "of the two great rivers of India, the Ganges and the Indus." On the assurance of Megasthenes, these rivers discharge their waters into the Indus; the Hydraotes (Ravi) among the Cambistholi, which receives the Hyphasis (Vipasa or Báyás, among the Astrobi, the Saranges, Uranjira or Báyás) among the Necei, and the Neudrus (Hakrar) among the Attaceni, falls into the Acesines" (Chenáb.) Here we have the Báyás rendered twice by mistake, as coming from among two different people, which is suggestive of two different rivers being intended. Let us place the Hesidrus (Satiej) between the Hyphasis and Neudrus *instead of the Saranges*, and the description will be cleared up, the rivers appearing in their proper order. Arrian is full of errors, and he freely charges Curtius and other writers with inaccuracies.

* The whole of this passage can be disproved. The five rivers of the Mahábhárata, were five separate streams, of which *the Sattader (Satiej) was one*, while the Indus is spoken of as *forming a sixth*, "flowing beyond the mountain." The Chenáb below its confluence with the Satiej is commonly known as "Panjnad" *at the present day*. It was called so in the Ain Akbari in the sixteenth century, and we have the authority of Dr. Percival Lord to set against Burnes who was a poor observer compared with the former. Dr. Lord has recorded experiments upon the silt of the Panjab rivers. No. 1 "on the water of the Chenáb just above its junction with the Ghara." No. 2 "on the water of the Ghara." No. 3 "on the water of the Panjnad, after the union of the Ghara and Chenáb."

Is this conclusive? With regard to the Indus, the writer of the notes quotes Al Biruni an Arab geographer of the tenth century, who says, "so the rivers flowing from the northern side of these

* "Thus, too, is solved the difficulty in providing a place for the 'Satiej amongst the five branches of the 'Panjnad,' which has compelled modern geographers to transfer that name from the Indus to the Chenáb. The latter has no claim whatever to this title,

"which as Burnes justly observes, is unknown upon its banks. The 'Panjab' or 'Panjnad' is the Indus itself. The five rivers of the Vedas and Mahábhárata were five separate streams. The application of the term to any one river appears to be of later date."

same mountains (Himalaya) when they unite near Turmaz, and from the river of Balkh (Oxus) are called the *seven rivers*." The reviewer asks, "may not these and not the seven rivers of the Panjab, be the "Hapta Hendu"* of the Vendidad?" The answer is, that the Indus at Mithankot, at the confluence with the "Panjnad" or Chenáb, is to this day known as the "Satnad" or seven rivers. The discovery of the course of the old Satlej, into the Indus, also explains why some of the Arab historians of the middle ages did not apply the term "Panjnad" (five waters) to the Chenáb, which it received in later times.

This discovery helps us to understand a confused passage quoted by the reviewer from Al Biruni of the tenth century, who clearly defined the position of the Satlej. He mentions certain other rivers and says: "*They all combine with the Satlader below Múltan.*" The reviewer remarks, "from this, obscure as it is, one point at all events seems clear, which is, that the rivers collected from the mountains of Bhatal joined the Sutlader (Satlej)." Here, he believed, he had secured one step towards the demonstration of his theory, viz., the identity of the rivers Satlej and Hakrá. But I have now to disclose the fact that the western limb† of the Hakrá has been actually traced into the old Satlej, above its junction, with the old Indus, thus confirming Al Biruni's geography! The writer further observes that the translator has "endeavoured to make his description agree with modern geography." It is sufficient to point out that, if this had been his intention, the translator would have used the modern name *Ghárá* and not the ancient *Sutladar*.

The "Notes" next call in evidence Muhammad Kasim, the first Arab conqueror, and others, who marched up from Alor to Múltan in the eighth and tenth centuries, without meeting the Satlej in their way. Its absence from its present course is now accounted for, because it was flowing more eastward, direct into the Indus.

With reference to Al Biladuri who says, that "the Sindh after passing Alor bears the name Mihran." We have Masudi in A.D. 915, who thus describes the Indus according to Sir H. Elliot's translation (Cunningham, page 150). "The Mihran of Es-sind comes from the well-known sources of the highland from the country belonging to Kinnauj in the kingdom of Budah and of Kashmir, El Kandahár and El Tákin. The tributaries which rise in this country run to El Múltan, and

* "The Sapta-Sinhavas, or, 'Land of the seven rivers' of the Rig Veda."

† "The western limb of the Hakra recently brought down a running

"stream from some extra rain in the desert, which was diverted by a bund, a short distance only from the old Satlej bed south-east of Ahmedpúr."

from thence the united river receives the name of Mihran." Cunningham says: "in this passage Tákin must certainly be intended for the hills of the Panjab. The Kabul river and the Indus both flow through Gundhára or El Kandahár, the Jhelam comes from Kashmir, and the Báyás and Satlej flow through Jalandhár and Káhlúr, which in the time of Hwen Thsang were subject to Kanoj. The only other tributaries of the Indus are the Chenáb and the Rávi, which must, therefore, have flowed through the kingdom of Tákin." Here, then, are the *seven rivers* (Satnad) distinguished, while the Indus "receives the name Mihran" from the confluence.

From this evidence it seems clear that the Satlej was *always* one of the five rivers of the Panjab, that it did *not* lose its name on joining the Báyás, and that it was always one of the tributaries of the Indus. It is also clear that the Indus was known as Mihran below the confluence in the tenth century, that the Chenáb has been known for some centuries, and is still known as "Panjnad," while the Indus is named "Satnad" which agrees with the "Sapta-Sindhavas," or land of the seven rivers, of the Rig-Veda.* All this shows the *incorrectness* of the conclusions arrived at by the reviewer, viz., that the Sótra or Hakrá was the bed of the Satlej, which dried up in the thirteenth century, when its waters became diverted into the Báyás valley. The old bed of the Satlej which joined the old Indus, probably, as far back as the Indo-Scythic period, having been discovered: and it having been demonstrated that the Ghára or Satlej was flowing as a distinct stream, about A.D. 1200. It only remains now to clear up some points connected with the Hakrá and Nára.

† The western or Naiwal arm, is unknown as Stóra. This has recently been ascertained on the ground. The eastern is called both Sótra and Chitrang, which agrees with both the Topographical and Irrigation Survey maps. The Hakrá does not acquire the name Wahind until it bifurcates in lat. 29°10". This name is applied to several depressions in the Baháwálpur State, it simply means *flowing* (from Wáhna, to flow) hence Wáhdá flowing.

‡ The point where the Hakrá "became continuous" with the Nára is, of course, where it ended its course in the old Indus.

* "Which re-appears as Hapta Hendu of the Zend. (Elphinstone, page 147)."

† "From the junction of its eastern and western arms near Bullur, on the frontiers of Bikanír and Bháwálpúr, the Hakrá traverses the latter state, where it loses the name Sótra and acquires that of Wahind (river of Hind)."

‡ "Near Khangarh, on the Sindh

border, the channel turns southward, and about thirty miles south-east of Rori it becomes continuous with the old river bed marked in maps of Sindh as Eastern Nára.

"The Nára or Nala which also bears the names of Hakrá, Dhora, Wahind and Dahan, is to be traced from this point southward, past Amarkot to the Rann of Kach."

It has already been pointed out that the Hakrá joins the Nara at an angle of about 50° while the course of the old Indus, above Bukhar, is directly continuous with the Nara (see Cunningham, Map IX). The southern course indicated corresponds with Map IX (see page 251). "The old bed of the Indus still exists under the name of Nara and its course has been surveyed from the ruins of Alor to the Rann of Kach. From Alor to Jakrao, a distance of 100 miles, its direction is nearly due south. It there divides into several channels, each bearing a separate name. The most easterly channel, which retains the name of Nara, runs to the south-east by Kipra and Umrkut, near which it turns to the south-west, and is there lost in the great Rann of Kach." Lieutenant Fife, R.E., says,* "At Nowakote, the Nara flows in two channels, one of which is termed the "Hakrá" in this part of the country" near the Rann.

The writer of the "Notes" tells us that Hakrá "is a modified form of Sagara." We shall see further on that both the western and eastern branches of the Mihran, which formed the Delta, were also called Sagara. And it is, at least, another hint, that the waters of the Indus flowed in all three branches.

All that the reviewer writes about the formation of the Rann of Kach and the water route of Alexander to the sea, agrees with Cunningham "Map IX." The only point to consider being that instead of the Nara being an independent stream, it was the *most easterly branch of the old Indus*, which bifurcated at Jakrao.

The writer now quotes a legend of Sindh which, he believes, confuses two events, *viz.*, the destruction of the capital of the Sumras (Muhummad Tur), on the *lower Hakrá*, with the "desertion by the main stream of the eastern branch of the Indus, the Sindh Sagara or Dhora Puran." We can better understand the cause of the confusion, when we consider that both events refer to branches of the *same river*! The lower Hakrá of the writer, was only "the most easterly channel" of the Nara or old Indus. It also, near the Rann, was called Sagara (of which Hakrá is a modified form.) But the reviewer is here again wrong in his dates! The phenomenon of turning the stream "*above Aror*" in the Legend† is referred to the time of "Delu Rai, who governed the country between the capital and Aror."

Cunningham says (page 274), "the date of this prince is doubtful; McMurdo has assigned A.H. 140 A.D. 757 as the year in which Chota, the brother of Dilu, returned from his pilgrimage to Mecca, but as Mansura, which was destroyed by an earthquake *in his reign*, was still a flourishing city in the beginning

* "Report on the Eastern Nara," page 40.

† Tarikh-us-Sind, vol. i, page 256. Elliot's History of India.

“ of the tenth century, when visited by Masúd and Ibn Hankel, “ it is clear that the earthquake cannot have happened earlier than “ A.D. 950,” whilst the desertion by the main stream of the Mihran, from the eastern or great branch to occupy the western or smaller branch, occurred *much later*. “ Al Biruni, in the eleventh “ century, describes the eastern as the greater mouth of the “ Mihran, while at the time of the invasions of Muhammad “ Tughlak and Firuz Shah (A.D. 1350 and 1370) the western “ branch, which flowed under Thatta, was the main stream.” We know, too, that according to McMurdo (Cunningham, page 280) the change in the main stream to the west of Haidarabad did not take place till A.H. 1000, A.D. 1592, “ and was coincident “ with the decay of Nasirpur (the capital) which was only founded “ in A.D. 1350.” It is important to recollect these dates, because they indicate *corresponding changes in the course of the upper Mihran, between Uch and Bakkar*. We have read that the river “ did not rejoin the old channel at Mithankot until *early in the present century*.” It can, therefore, be understood, how gradual and protracted was the action of the current before the full stream had excavated its present bed, through the limestone rocks by Bhakar. To return to the phenomenon of the Legend in the time of Delu Rai. We have seen that the event occurred, most probably, in the tenth century, which approximates to Tod’s date *for the drying-up of the Hakrá, viz., A. D. 1044*. Can we trace any connexion between these two *Legendary* events? The Legend specifies “ *the country between the capital “ and Aror,*” which, therefore, was on the course of the Narra. And it very probably refers to the *final desertion of the Narra* by the stream of the Indus which would naturally have an appreciable effect on its affluent, the Hakrá. Perhaps, that river, no longer able to reach the Indus “ which had “ forsaken its ancient course, lost itself in the sands of the deserted “ channel,” and, perhaps, this was a notable cause for the disappearance of the Hakrá! We learn from Cunningham (page 251) that “ the waters of the Indus *gradually* worked their way to the “ westward, until they at last turned the northern end of the “ range at Rori, and cut a passage for themselves through the gap “ in the limestone rocks between Rori and Bhakar. As the “ change is assigned to the beginning of Dahir’s reign, it must “ have taken place shortly after his accession in A.D. 680, and as “ Muhammad Kasim, just 30 years later, was obliged to cross the “ Indus to reach Alor, it is certain that the river was permanently “ fixed in its present channel before A.D. 711.” Although the river was fixed in its present channel in the eighth century, it is only a reasonable deduction, from the *later periods of the changes above detailed*, both in the lower and in the upper course of

the stream, that the Indus had not *finally deserted* the Narra channel until an after century. The preservation of the capital (Mansura) on the Eastern Mihran, which *was a branch of the Narra*, below its bifurcation at Jakrao, offers fair testimony that the *Upper Nara* was not entirely deserted, down to the destruction of Mansura by an earthquake, in the tenth century. Nor does it seem unreasonable to connect the final desertion of this channel with so violent a geological disturbance as the great earthquake noted in the History of Sindh.

Thus are we able to connect, with some show of reason, the two *Legendary* events, *viz.*, the drying-up of the Hakrá and the drying-up of the Narra, for neither of which occurrence, can accurate historical dates be ascertained. But this possible unity of the two events enables us to elucidate some obscure allusions in the Legend quoted. The city destroyed on the lower Hakrá, was called Muhammad Tur. The Narra was called Hakrá, between Choondawah and the Rann of Kach* and the *lower Narra* was only "the most easterly channel" of the old Indus, which flowed east of Alor. Hence, "a strong embankment above the town of Alor, to turn the course of the waters towards Bhakkar," would effectually dry up the lower *Nara*, and might cause the Hakrá to "lose itself in the sands of the deserted channel."

The time of Dilu Rai, we have learnt, is referred to the tenth century. When the river "was thus turned from its old course," we are told, "that the want of water ruined the lands of the tribe of Sumra, and that the Samma tribe which had been subject to the Sumras, removed from that country and settled near Thatta." Thus, this Legend also approximates in date with Tod's Rao Hamir, *viz.*, A.D. 1044. The change "of the main stream from the eastern or great Mihran to the western or smaller branch," we have seen, occurred at any time between the eleventh and the fourteenth centuries. This change, "is said by McMurdo to have caused the fertilization of the lands near Thatta"—to which we have also seen the "Samma tribe" in the tenth century, had removed. This partly agrees with the story on the Hakrá. When that stream dried up, the *inhabitants* removed to the valley of the Indus—Sumras and Summas together. And there we shall find them at a later period, *viz.*, the *thirteenth century*: the downfall of the Sumra dynasty being deferred to that time.

The reviewer associates the drying-up of the lower course of the Nara, with the "great famine and the exodus" from the lands of the (Upper) Hakrá.

* See Report on Eastern Nara, page 40.

* We have ascertained that the nearest approach to a fixed date for the disappearance of the Hakrá is A.D. 1044.

We traced the Bhattis and Pahoos to have been in possession of the lands of Khadal in the twelfth and thirteenth centuries—their former rulers (the Sumras) having *previously* disappeared. The re-appearance of the Sumras and Sammas *in Sindh*, and their dynastic succession *on another scene*, has therefore no bearing on the real story.

It is, however, curious to find these Rajputs ruling in Sindh five centuries after the Muhammadan conquest. On enquiry we find that the writer's dates have reference to a temporary usurpation of power. Sultan Julal-ud-din of Khwârasm invaded Sindh A.D. 1223.† “He fought Chengis Khan on the Indus, then he came into Sindh and went towards Dewal at Makran.” Here we discover at a glance, that the Sumras had an opportunity of attaining power during the struggle for supremacy between the Moghuls and Arabs.

Nasir-ud-din Kabacha “assumed royal dignity” and reigned from Múltan to the seashore from A.D. 1222 to 1228 (Elliot, vol. iv, page 302). He extended his rule to Kahrasm. The Sultan Masad, A.H. 633, A.D. 1236, left Mahomed Julal-ud-din as Governor of Sindh. In H. 662, A.D. 1264 Sultan Ghias-ud-din gave over the provinces of Lahore, Múltan, and Sindh to his son, Sultan Muhammad. In A.D. 1283 Sultan Muhammad was slain in battle against the army of Chengiz Khan—which brings us to the date of Jam Juna of the Samma tribe, “who drove the Turks out “of Bakhar and ruled all Sindh.” But this was only during the incursion of the Moghuls! “Tamashi succeeded Jam Juna. He “was taken prisoner and carried away to Delhi, but was allowed “to return and resume his Government.” In “A.D. 1296, the “Saldai Moghuls from Sistan arrived and possessed themselves of “Siwistan, (Elliot, Vol. i, page 340). Towards the close of his “reign Sultan Alá-ud-din despatched Ghazi Malik to expel Chengiz “Khan's Moghuls and gave him Múltan, Uch and Sindh in jaghir. “Khusen Khan (son of Sultan Muhammad) having watched his “opportunity, deposed Alá-ud-din and became master of the “throne. Ghazi Malik marched up at the head of the Sindh “and Múltan forces, expelled Khusen Khan and seated himself in “his place under the title of Sultan Ghias-ud-din. *At this time,*

* He quotes Ferishta in proof of the “Sumras having ruled at Debal or “Thatta, when the Sultan Jullal-ud- “din invaded Sindh in A.H. 620— “A.D. 1223. Also, that Unar, the “first Jam of the Sammas, became “ruler on the overthrow of the Samra “dynasty, and was succeeded by Jam

“Juna, who reigned in A.D. 1283, “so that the downfall of the Sumras “must have occurred between A.D. “1223 and that year, having been “preceded by the disappearance of “the Hakrá river”

† Tabakati Nasiri, Elliot, Vol ii., page 302.

"a number of the tribe of Sumra rose and possessed themselves of Thatta. Again, in A.D. 1350, Sultan Fīzoz Shah succeeded to the throne. Taghi (a rebel slave) who was at Thatta, on learning this, hastened to give battle at the head of the tribes of Sumra, Jarja and Samma."

From all these dates, we are in a position to judge that the Sumras and Sammas having migrated *at an earlier date* from the lands on the Hakrá, took every opportunity during the thirteenth and fourteenth centuries, to rise into power *in Sindh*. And we can now understand the passage in the *Tarikh-us-Sindh*, (Elliot, Vol. i, page 256) which records, "From the year of the Hijri 700 (A.D. 1300) until 843 (A.D. 1439) that is to say, for a period of 143 years, the Hindu tribe of Sumra were the rulers of Sindh." But the reign of the Sumras in Sindh was a *posterior* event, and was quite independent of their *preceding* reign on the lands of Khadal.

With regard to the ancient importance and abundant water-supply of Sehwan, the writer's remarks agree with Cunningham (page 264), who describes the Manchura Lake, which "must have existed long previous to the change in the course of the Indus." "In all the old maps it is placed on a western branch of the river. In ancient times, however, when the river flowed down the Eastern Nara, Sehwan was not less than 65 miles distant from its nearest point at Jukrao, where it leaves the sand-hills." "In confirmation of this, Abu Rihan, A.D. 1031, in speaking of the itinerary of Sindh, he says,* From Aror to Báhmanwá, also named El Mansura, is reckoned 20 parasangs; from thence to Loharáni, *at the mouth of the river*, 30 parasangs." As Mansura was only a short distance below Jukrao, where the Nara bifurcated, and it was on the river bank, it is a fair inference that the Indus was still in the Nara channel in A.D. 1031, at which period, however, Mansura "was no longer a great fortress and the capital of the country."

The reviewer now sums up under ten heads, some of which require notice.

† "The course of the old Indus between Uch and Alor has been defined.

"The ruins of Alor are situated to the south of a gap in the low range of limestone hills, which stretches from Bhakar towards the south for about 20 miles, until it is lost in the broad belt of sand-hills which bound the Nara, or old bed of the Indus on the west. *Through this gap* a branch of the Indus once flowed, which protected the city on the north-west. To the north-

* Ancient Geography of India, "traceable from the Indus to the Cunningham, page 276. "Nara, &c."

† "4th.—There is no old channel

" east it was covered by a second branch, which flowed nearly at
 " right angles to the other at a distance of three miles. The
 " river gradually worked to the westward from its original bed
 " in the old Nara. According to native historians, the final
 " change was hastened by the excavation of a channel through
 " the northern end of the range of hills between Bhakar and
 " Rori."*

† The movement of the waters began higher up—between Uch and Rori. Besides which the channel of the Narra from Aror to Jakrao was " bounded on both sides by broad ranges of low " sand-hills," which confined the waters in a narrow bed, and forced them through the gap above described.

‡ The secondary branches of the Nara below Jakrao, formed the Delta (Cunningham, page 282). " The most easterly channel" has been described. " The most westerly channel, which is " named Purána, or the old river, flows to the S. S. West, past " the ruins of Brahmanabad and Nasirpur to Haidarabad, below " which it divides into two branches. Of these, one turns to the " south-west and falls into the present river 15 miles below " Haidarabad and 12 miles above Jarak. The other called the " Gani, turns to the south-east and joins the Nára above Romaka " Bazar. There are, at least, two other channels between the " Purána and the Nara, which branch off below Jakrao. At this " point, the sand-hills on the Western bank suddenly terminate, and " the Nára, spreading over the alluvial plains, is divided into two " main branches, which grow wider and shallower as they advance, " until the western channels are lost in the hard plain, and " the eastern channels in a succession of marshes. But they " re-appear once more, below the parallel of Hala and Kipra, and " continue their course as already described above." In the report of the Eastern Nara (page 39), the branches of the Nara are thus noticed. " The river, in place of flowing through one broad " channel, throws out two branches a short distance above " Togacha (near Jukrao). The eastern branch skirts the foot of " the sand-hills supplying many of the dunds, and rejoining the " main stream at Puttaee. The western branch, as far as " Mittrow, flows through a sandy soil, but beyond that place it " reaches the alluvial plain, where the channel disappears, and " the water spreads over and fertilizes the plain for many miles, " ultimately returning to the main stream." Also at page 84,

* Ancient Geography of India, " river."
 page 258.

+ " 5th.—The slope of the country is
 " from the Indus to the Nara, which
 " is against the supposition that the
 " latter channel was forsaken by the

‡ " 6th.—The Nara does not form a
 " Delta, while between Aror and the
 " borders of the Runn, it does not
 " approach, nor has it any communica-
 " tion with the Indus."

"Lieutenant Fife contemplates closing altogether a portion of
 "the eastern branch of the Nara, and thereby depriving the
 "lands which it feeds, of their supply of water, excepting
 "when in extraordinary floods, water can well be spared, and
 "*forcing the whole body of the stream into the western*
 "*branch,* and towards the fertile plain, extending from
 "Mithrow to the parallel of Kippa." It was the western
 branch by which the Nara formed the old Delta. "The present
 "head of the Delta (Cunningham, page 282) is at the old town
 "of Mattari, 12 miles above Haidarabad, where the Phuleli
 "separates from the main channel of the Indus. But in ancient
 "times when the main stream, which is now called Purana or
 "the old 'river' flowed past Aror and Brahmanabad to Nirunkot,
 "the first point of separation of its waters was either at Haidara-
 "bad itself, past which a branch is said to have flowed by Miani
 "to Trikal, or 15 miles to the south-east of it, where the Phuleli
 "now throws off the Guni branch to the south and then proceeds
 "westerly to join the present stream at Trikal. The true head
 "of the old Delta was therefore, either at Haidarabad itself, or
 "15 miles to the south-east of it, where the Guni, or eastern
 "branch of the Indus, separated from the Phuleli or western
 "branch. All the old geographers agree that the Mihran
 "divided near to and above Mansura," which was a short distance
 below Jakrao. "But the apex of the Delta is *not a fixed point*"
 as Lieutenant Wood remarked (Oxus, page 20), so that the
 features of the Delta are liable to change.

* Arrian also mentions (Cunningham, page 259) that Alexander
 allowed "his fleet of boats to continue their course down the Indus,
 "while *he himself marched against a neighbouring prince* named
 "Oxycanus. From the city of Oxycanus, Alexander led his forces
 "against Sambus," who has been identified with the Raja of Sindoma-
 mana. Curtius mentions that Alexander returned to his fleet.
 "He *marched back to the river,* where he had ordered his fleet
 "to wait for him." As Alexander's land expedition, when "he
 "quitted his fleet at Alor" (the capital of Musikanus), traversed the
 ground between Bukhar and Sehwan, it is evident that the Indus
 was not in its present course, between those two places, and
 that Alexander went out of his way to take Sindomana before
 he reached the delta.

† Their narratives are well-known to be brief and unsatisfactory,
 besides which, the Hakrá was *not* so large a river as the reviewer
 supposed. Perhaps, the point where Alexander "left his fleet

"Arrian mentions that Alexander
 took Sindomana (Sehwan) before he
 reached the Delta."

"of Alexander's historians to a large
 "river such as the Hakrá entering
 "the Indus," &c.

† "7th. No allusion is made by any

"of boats to march against a neighbouring prince," was *above* the junction of the Hakrá with the Indus.

* Since the lower Hakrá was the Nara, or "the most easterly branch" of the old Indus, Elphinstone was right when he "placed Rewar and the scene of Dakir's defeat upon the Indus." The river began to flow "by Bakhar" in Dahir's reign, but there is reason to suppose that it had not finally deserted the Nara until a later period. Dáhir had made Bráhmaṇabád his capital, and *Rewar* was only a "residence of the King of Sindh," on the banks of a river called Wadhává. If this was identical with the lower Nara, it was only 30 miles distant from the Eastern Mihran, which could hardly have taken a native army "several marches" to reach.

† McMurdo quotes native authors to show that the western or *smaller* branch of the Mihran was *also* called the "Sagara" river, "which he thinks may be identified with the Sugapa Ostium of Ptolemy," which was "also the most westerly branch of the Indus in his time." (Cunningham, pages 295—299.)

"McMurdo also quotes the native authorities to show that it (Debal) was on the Ságára branch of the Indus which flowed "past Bhambúra" (Barbarike). Thus we see that all the chief branches of the Indus were called Ságára.

‡ By *both rivers*, is meant the Nara and the eastern Mihran. But as the western Mihran was also called Ságára, as shown above, and as this was the nearest branch by which Muhammad Kasim could approach Nirun (Haidarabad), it was most likely the western Ságára, to which Sir Henry alluded, and not to the distant Nara.

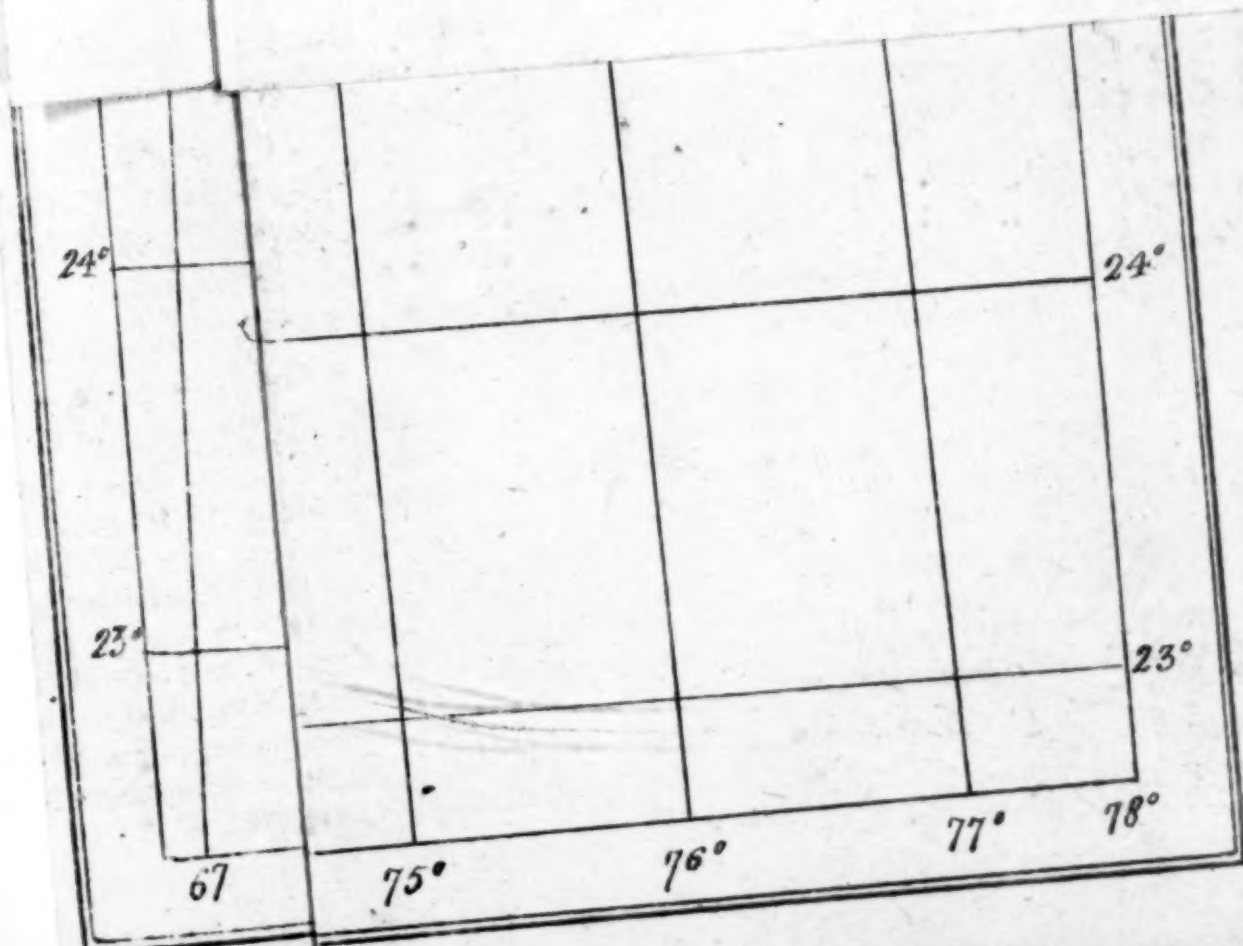
The course of the lost river has been traced from the Hima-láyás *not to the sea*, but into the Nara (old Indus). And an old bed of the Satlej has been traced *not into the Chenáb*, but into the Indus, which was doubtless occupied by the stream in ancient times, perhaps as early as the Indo-Scythic period, but certainly *long anterior* to the first junction of the Satlej and Bíyás. Whilst the period (the thirteenth century) upon which the reviewer's

* The reviewer now tries to fix the site of "Muhammad Kasim's fight with Rai Dahir" on the lower Hakrá instead of on the Indus. "He crossed the Mihran at Nirun (Haidarabad) and after several marches the army came to Jewar or Jaipur on the banks of a stream called Wadhawah or Dadhawah."

† "This also was evidently the greater arm of the Mihran, described by Rushid-ud-din, as known by

"the name of Sindh Sagara."

‡ "The term Sagara being applied to both rivers has led to some confusion. Thus in Sir H. Elliot's manuscript of the Chachnámeh, the Wáhind Ságára is mentioned as the stream up which Muhammad Kasim sent his mangonels in boats towards Nirun when the Sindh Ságára, as given in the other MSS. is evidently intended."



City Press.

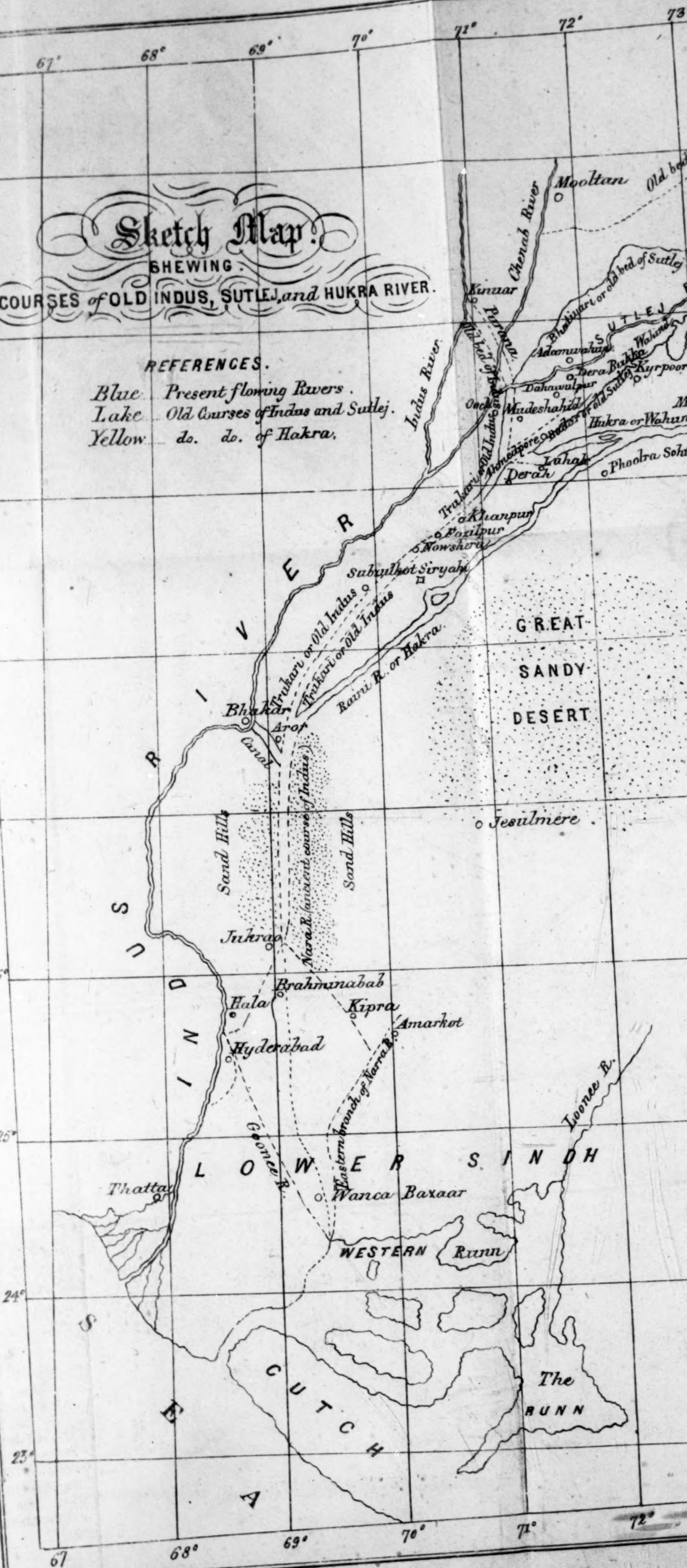
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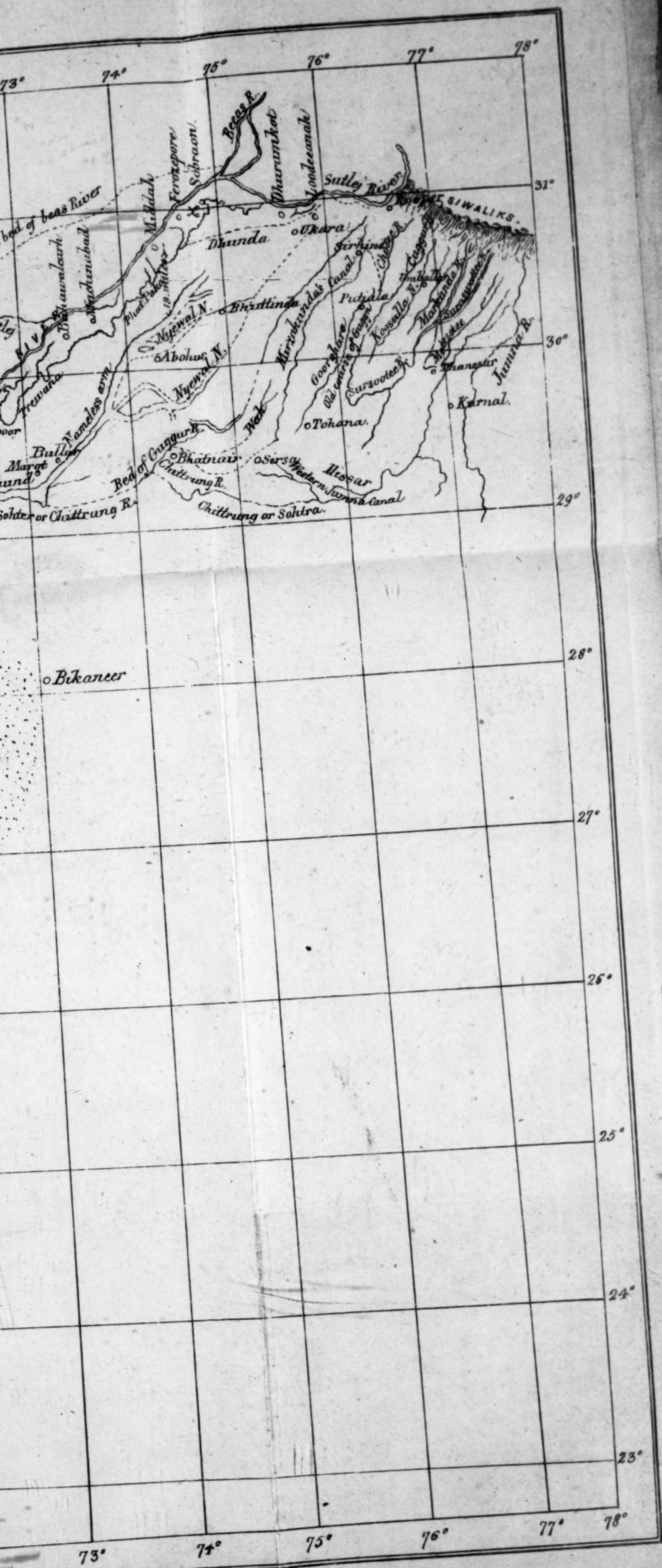
SHEWING

COURSES of OLD INDUS, SUTLEJ, and HUKRA RIVER.

REFERENCES.

Blue Present flowing Rivers.
 Lake Old Courses of Indus and Sutlej.
 Yellow do. do. of Hakra.





whole story *hinges* has been shown to be incorrect. The structure of argument founded upon his theory, has consequently fallen to the ground. I feel bound, therefore, to offer another theory. There is a legendary couplet *faintly heard* in the desert, which points to a mythic stream that flowed in remote ages, *over the desert proper*, which came from *far eastward* and reached the sea—by the disappearance of which, the sand-dunes of the great desert are said to have been formed. This mythic stream is

Old even beyond Tradition's breath.

Agreeing with this description, is a river named Márút Bredhá, amongst the 42 rivers of India mentioned in the Bhágwát (chapter 19, verse 18.)

The Sanskrit Bredghá means a flowing river, through Maru-Marustháli (region of death). There is a legend in the Addhiátún Rámàun-ud-Kanch (chapter 3, verse 63), which describes Rám Chandra bending his bow at the ocean, which had at first denied him a passage; and being determined to aim his shaft at *something*, he turned at the request of ocean *to the northward*, and shot some giants who dwelt in that direction and were the terror of the country. Since that time, the river that flowed there dried up, and the earth became a sandy desert! This legend, probably, portrays the disappearance of the old desert stream by a sudden geological disturbance in the Hilmá-layás. The giants being emblematic of mountains! Now, "an attempt was made some years ago by the late Lieutenant-Governor of Bengal, in an article published in the journal of the Asiatic Society, to show the possibility, that at one time, the Jamna on leaving the hills turned west instead of east, and crossing the desert, emptied itself into the sea in the Scinde direction." (*Pioneer*, October 2nd, 1874)

The legendary course of the Márút Bredhá *in remote ages* through the desert of Maru, seems to give coloring to this idea. My theory is, therefore, that the Jamna was the Márut Bredha! When it moved away to the east, it kept up a lingering connection with the desert by means of its known union with the Saraswati, and its more than probable union with the Chitrang—which produced *in later times*, the lesser stream called the Hakrá. Perhaps, the Naiwal channels from the ancient Satlej also joined the Márút Bredhá, at a time when the whole tract south of the Himaláyas was at a lower level than at present

The *real* lost river of the Indian desert was, therefore, the Mythic Márút Bredhá—not its bantling, the Hakrá.

ART.—VI.—THREE ESSAYS ON RELIGION.

BY JOHN STUART MILL.

THESE three posthumous essays seem to demand particular attention. They contain the concentrated essence of a wonderful amount of the deepest reflection.

The wonderful training of Mill's boyhood and youth recorded in his remarkable Autobiography, his peculiar disposition, his unwearied industry, the concentration of his faculties on the object under his consideration, his singular freedom from every shape and form of traditional prepossession, enabled him to go into his arguments almost as a disembodied spirit "all naked feeling and raw life." If Macaulay was described by Sidney Smith as a book in breeches, we might contemplate in Mill absolute bare thought. His intense desire for truth, and truth in the sense of demonstrated fact, delivered him from the "idols of the cavern, the tribe, the school, the market place, the theatre;" and brought him (as far as is possible) face to face with the problems of the mysterious universe in which we live, and which he was determined to investigate to the uttermost.

This is true of all Mill's speculations, but strikes us more than ever in these three essays published after his death, forming a curious postscript to his Autobiography. They seem to give us his last will and testament of thought. They offer to mankind the concluding results of long years of unflinching and untiring meditation—the best boon which he could bequeath to humanity—the flower and crown of human reason.

We say emphatically of human thought; for all conceptions of Divine truth, all instructions and every least shadow of assistance from any inspired Revelation, or even from any other human intellect beside his own, because admired and honoured in past ages, are resolutely and persistently excluded from the formation of his theories on the most serious problems of human life.

Man's naked unassisted thought, trained and disciplined to the utmost ability and energy, contemplates in an almost sublime isolation its own relation and the relation of all men to the universe in which we find ourselves. We see him by means of these posthumous essays* not for an hour or day but for years wrapped up in the engrossing consideration of the questions ancient but ever new; † "What is man and whereto serveth he?—What is his good and what is his evil?—God and angel, priest, prophet, philosopher, sage, let them be silent, and let me think out myself as

* Ecc. xviii, p. 8.

† Ecc. ii.

I am." We see him in his argument stand solitary, magnificent ; but we think a ruin. We hear him lift up his eloquent voice—it sweeps with surprising power over the heart, and then when you expect the most, it dies away in a strange low wail like the wind in some fallen and shattered temple of antiquity.

Is it a Manfred enunciating from some Alpine summit in words of striking eloquence, and in a sublimity of isolation the concentrated philosophy of despair? Is it a Prometheus chained upon the peak of Caucasus, the eagle rending his heart without ceasing, and yet in the extremity of agony, amid the crash of thunders and the collision of worlds, breathing still one sad sweet strain of trembling but quenchless hope? *

It is remarkable that in the last essay, and in several passages, especially towards its close (we are reminded by it of great heathen thinkers) a strange expression of hope, not apparently in perfect agreement with the logical development of his argument, comes out with surprising force.

Thus Plato in a striking image likens his philosophy to a solitary plank to which the shipwrecked mariner clings amidst tempests and waves and weariness. It is so picturesquely expressed that you seem to see the sage drifting thus away into the darkness, but uttering at the same time a cry of hope, believing that the support, however frail, will bear him at last safely to a shore of peace and haven of light.

† In the same spirit Mr. Mill declares that as appearances point to a Being† who has great power over us, and of whose goodness§ we have evidence, though not of its being his predominate attribute—and as we do not know the limits either of his power or goodness ; there is room to hope that both the one and the other may extend to granting us this gift of Life after death, provided that it is really beneficial for us. We have here expressions about futurity which seem to us different in tone and sound from those which meet us in the preceding essays ; and which, giving utterance to his latest and most mature thoughts, are exceedingly welcome and consolatory.

We propose then to examine these three Essays as much as possible by themselves, although it is plainly impossible to dis sever them altogether from the Autobiography, or from Mill's other writings, as *e.g.*, from his later criticism on Comte and the Positive Philosophy. Nevertheless, they constitute a whole in themselves ; they give us the important points of a theory formed in a long series of years and a long course of meditation. He himself connects them together, and in particular uses some arguments of the

* See the last Chorus in the Prometheus Vincit.

† Page 210.

‡ Cf. page 240
§ Page 256.

first in the discussions of his last essay, which, indeed, would be in a great measure incomplete without the previous reasonings.

We profess at once, that while it is our purpose to observe the character and force of the argumentation of these essays, we cannot help, above all, observing in them a witness and support to the Christian faith, both in their negative and positive conclusions. We find in them the overthrow of many prevalent fallacies, and the unexpected maintenance of certain aspects of truth, too often disallowed altogether by "the destructive criticism."

It is true that the able authoress of the introductory notice, while maintaining "that the author considered the opinions expressed in these different essays as fundamentally consistent,"* nevertheless implies that some discrepancies may seem to remain after a really careful comparison between different passages, and again that "they must not be regarded as a connected body of thought." But although the first two essays were written between the years 1850 and 1858, while the third was written between the years 1868-70, yet the author, in the third, two or three times appeals to and applies his arguments in the first essay; and although he does not mention the second by name, yet he is evidently carrying out and defining the exact idea of the utility of religion which is the subject of that second essay. We think, therefore, that we are fully justified by the author himself in regarding these treatises if not as a connected body of thought, yet as presenting us with a most interesting development of thought on the subject of religion, and as supplying the main links of the chain of reasoning which guided him to the conclusions at which he arrives.

It is certainly possible that a further study of the works of a later date, such as that of Mr. Darwin and others, might have in subsequent revisions, modified the opinions expressed in the *Essay on Theism*. But it is evident from that *Essay* itself that he had fully and maturely (after his constant practice) considered the bearing of their views on this particular question. We, therefore, have no hesitation in treating these three essays as containing a distinct and emphatic expression of the author's mind on the particular subject of religion, and, as is said in the Introduction, "the carefully balanced results of the deliberation of a life-time."

The first essay is entitled *Nature*. Mill begins by a careful discussion of the meaning of the word, and attacks the fallacious or indistinct employment of the term. He objects with great justice to the employment of the word *Natural*, as implying in itself excellency in the ideas which it is used to designate. The

word may be applied to the total phenomena of the universe, either including *volition* or excluding it. He shows the extreme importance of settling clearly whether we include or exclude that idea. He also demonstrates the futility of condemning Art in comparison with Nature, and elsewhere strikingly expresses the weakness of the notion that nothing but mere benevolence and goodness, in the common sense of kindness, are exhibited in the case of the world in which we live.

There is a grand but terrible passage in which he depicts a different view of Nature from that taken by what may be called the Rousseau school.

“* In sober truth nearly all the things which men are hanged or imprisoned for doing to one another, are Nature's every day performances. Killing—the most criminal act recognized by human laws, Nature does once to every being that lives; and in a large number of cases after protracted tortures such as only the greatest monsters whom we read of have purposely inflicted on their living fellow-creatures. Nature impales men, breaks them as if on the wheel, casts them to be devoured by wild beasts, crushes them with stones like the first Christian martyr, starves them with hunger, freezes them with cold, poisons them by the quick or slow venom of her exhalations, and has hundreds of other hideous deaths in reserve, such as the ingenious cruelty of Nabis or Domitian never surpassed. All this Nature does with the most supercilious disregard of mercy and of justice, emptying her shafts upon the best and noblest indifferently with the meanest and worst, upon those who are engaged in the highest and worthiest enterprises, and often as the direct consequence of the noblest acts; and it might almost be imagined as a punishment for them. Everything, even that which the worst men commit either against life or property, is perpetrated on a larger scale by natural agents. Nature has Noyades more fatal than those of Carrier. Her explosions of firedamp are as destructive as human artillery. Her plague and cholera far surpass the poison cups of the Borgias. Even the love of ‘order’ which is thought to be a following of the ways of Nature is in fact a contradiction of them. All which people are accustomed to deprecate as ‘disorder’ and its consequences is precisely a counterpart of Nature's ways. Anarchy and the Reign of Terror are overmatched in injustice, ruin, and death, by a hurricane and a pestilence.”

Such are some extracts from this remarkable account of Nature, but the total cumulative force of the whole denunciation spread over several pages ought to be felt in order to appreciate the tremendous plea against the mere benevolent view of Nature.

* Pages 28-29.

He then discusses the justifications or excuses for the maintenance of that view. It is said that "good comes out of evil." He then replies that, evil might be said in like manner to come out of good; but he, with just discrimination, points out that this balanced antagonism is by no means the general tendency of either phenomenon. On the contrary both good and evil naturally tend to fructify each in its own kind, good producing good, and evil evil. It is one of Nature's rules, and (as he strangely expresses it) part of "her habitual injustice" that* "to him that hath shall be given, but from him that hath not shall be taken away even that which he hath." Hence he condemns strongly the writers on natural theology who have exhausted the resources of sophistry to make it appear that all the suffering in the world exists to prevent greater, that misery exists for fear lest there should be misery.† But if again it is replied that the goodness of God (viewed as the Author of Nature) does not consist in willing the happiness of His creatures but their virtue, and hence that the universe if not a happy is a *just* universe; he points out that this does not get rid of the difficulty. He answers with the old enigma that the wicked often prosper and the good often suffer. He reminds us that the necessity of redressing the balance has been deemed one of the strongest arguments for another life after death.

Hence, he draws the remarkable inference that "not even on the most distorted and contracted theory of good, which ever was framed by religious or philosophical fanaticism, can the government of Nature be made to resemble the work of a Being at once Good and omnipotent."

Thus he arrives at what, perhaps, may be called one of the most peculiar and startling of his conclusions. He maintains that if there be any author of nature, we must recognise a limitation to His power. There must be either something like the Matter or *hylé* of Plato and antiquity, or some opposing power, which is a limitation to the power of the beneficent Being. Hence also, as he argues afterwards, we perceive why design, and an "economy" in the Patristic sense, may be required for the carrying out the beneficent ends of the good Being. This revival of the ancient Zendic notions, or of the contest between Ormuzd and Ahriman, is surely very noteworthy.

There are striking and we may say classic passages of a similar character in Mill's earlier writings. They have been considered ‡ "both in thought and expression a complete contrast to the ordinary tone of Mr. Mill's disquisitions attempered as they generally are between benevolence and expediency." "Mr. Mill

* S. Matt., vol. xiii, p. 12.

† Page 36.

‡ Philosophy of Natural Theology, (Jackson) p. 176, note, and p. 224.

when his moral sentiments asserted themselves, felt these certainties as elements of his inner life. Rather than worship a Being whose unknown moral attributes fell beneath, not the dictates of utility, but the purest instincts of his own inmost morality, he goes on to declare that he is willing to suffer the horrors of eternal death.* "I will call," says Mill, "no Being good, who is not what I mean when I apply that epithet to my fellow-creatures; and if such a Being can sentence me to hell, to hell I will go."

In an able article on Mr. Mill's death, a critic says:† "It is impossible to read Mr. Mill's works with any attention, and in particular to look with intelligence on the latter part of his career, without seeing that by temperament he was essentially religious; but that, as far as positive doctrine went, his mind was an absolute blank. We believe that it was this sharp contrast between theory and feeling which drove him into the schemes for the improvement of the world which have been exposed to so many, and in some respects, well-founded objections. Having to love something, and being as it were chained down by his own logic to this world and this life past, present, and future, he struggled to make a sort of religion out of man as he might come to be after centuries or millenniums. Humanity, progress, a realization of all the ideals at which his theories pointed, these were his divinities:

"If he had consistently followed out his own views, if he had carried out his Benthamism with perfect consistency, the result would have been too hard, too grim, too dismal for his eager and sensitive heart. Hence came the faltering, the inconsistency, the romance of his later days."

This is a powerful and just criticism, and the ideas underlying it appear to gain new strength from these essays published after his death, in the last of which especially, the sympathetic expressions of the critic seem to be finding their realization.

"He bore a burden common to many. If he bent under it, it was not because his thought was less, but his sensibility was greater. When he died, one of the tenderest and most passionate hearts that ever set to work an intellect of iron was laid to rest. May he rest in peace, and find if it be possible, that his knowledge was less complete than he supposed, and that there was more to be known than was acknowledged in his philosophy."

The beginnings of the desired dawn seem to us to be shining out especially toward the close of that essay upon Theism which is, as we said, by far the most touching and interesting of the three. Without these the impression would have been like that left on us by the "Lucretius" of Tennyson, rayless and overwhelming.

‡ The comparison is well grounded, for it has justly been

* Mill on Hamilton, C. III, *ad-fin.*

‡ See "Poets of Roman Republic,"

† *Pall Mall Gazette*, May 10th, 1873, by Sellar, p. 254.
quoted by Mr. Jackson.

observed that "the views of Lucretius as to the natural origin of life, and the progressive advance of man from the rudest condition, by the exercise of his senses, and accumulated experience—his denial of final causes universally, and specially in the human faculties—his resolution of all our knowledge into the intimations of sense—his materialism and consequent denial of immortality—and his utilitarianism in morals—all present striking parallels to the opinions of one great school of modern thought." Allusion is here evidently made to the school of Mill; but then as in Mill so in Lucretius the idea of law in nature implies the further idea of power. It leads up necessarily, although this is not consciously realised by the Roman poet (as it seems to us it was not clearly by Mill), to the wider and higher idea of will. "This conviction of the universality and certainty of law, although antagonistic to the popular religions of antiquity, is no way inconsistent with the convictions of theism."* The mind of Lucretius was in one sense a *religious* mind also. "The higher conception of God was neither consciously accepted nor consciously denied by him. There is through all his poem a pervading solemnity of tone, as of one awakening to the consciousness of a great invisible power in the world. There is an inconsistency between the mechanical view of the universe which his understanding accepts, † but which is not acquiesced in by the higher speculative faculty which combines the feeling of the imagination with the insight of the reason. His belief is not atheistic nor pantheistic, it is not definite enough to be theistic. It is rather the twilight between an old and new faith."

How many of these strange and noble inconsistencies seem to be almost word for word like the later ideas of Mill!—how much like that twilight between the old and new is the state of mind represented to us in this last essay of Mill! In both the ancient and the modern grand Sceptic the condition is really higher than that put into the dying lips of the great Epicurean bard by Tennyson—

O Thou ! †
 Passionless bride, divine Tranquillity,
 Yearn'd after by the wisest of the wise,
 Who fail to find thee, being as thou art
 Without one pleasure and without one pain,
 Howbeit know thou surely must be mine.
 Or soon or late, yet out of season, thus
 I woo thee roughly, for thou carest not
 How roughly men may woo thee, so they win.
 Care not thou !
 Thy duty ? What is duty ? Fare thee well.

* Page 274.

† Page 280.

‡ Tennyson's Lucretius *ad-fin.*

The last essay for these reasons is, as we observed, by far the most touching and interesting of the three, though, perhaps, less perfect in style, and not so completely worked out in expression as the preceding ones. Before, however, we discuss its argument, it is necessary to glance over the second, on the utility of religion; because in it those yearnings of the soul which have been spoken of, began to take shape, and to utter more or less articulate cries, while at the same time, the "Dualistic" view comes into greater prominence." In this earlier treatise also he pronounces far more strongly in favour of the "religion of Humanity," than he would have done after his criticism on Comte with its grand and half-contemptuous pity had modified probably unconsciously his own previous conception of it.

He maintains the essence of religion to be* "the strong and earnest direction of the emotions and desires toward an ideal object recognised as of the highest excellence, and as rightfully paramount over all selfish objects of desire." He considers this to be fulfilled by the religion of Humanity in as eminent a degree, and in as high a sense, as by the supernatural religions in their best manifestations, and far more so than in many others.

This curious abstraction "Humanity" is, perhaps, the most singular object of adoration ever proposed for the worship of mankind. The idea of self-sacrificing duty, simply for duty's, or of benevolence for benevolence's sake, is conceivable, and grand, and, we believe, at the bottom of this philosophy, where it has any base at all. But the idea of "humanity," i.e., of the abstract human race as a motive of action is, we must say, almost comical. Hence also, as has been seen, the mere abstract idea has had to be linked to some concrete and flesh and blood Ideal of the female sex which has made it painfully ludicrous.

With this abstraction Mr. Mill unites the Buddhist idea of Annihilation as by no means unlikely to be the supreme good.† It has, indeed, been questioned whether this is the theory of the Buddhist creed.‡ But, although some authors deny it, Burnouf, Hodgson, Max Müller, Mr. Spence Hardy, B. St. Hilaire, Bishop, Bigandet, and others recognize it as the opinion of the Buddhist sages—and that it is so not only for the Initiate but for the masses (at least to some extent) we can ourselves bear witness. For we remember in a Burmese village seeing some boys in one of the kyoungs or monasteries prostrated apparently in deep devotion. We questioned an intelligent and well-educated Buddhist who was with us what they were engaged in, who informed us that they were praying. We asked to whom? After a pause he said "nobody;"

* Page 109.

† Page 121.

‡ Neibbhan or Nirvana.

and "for what?"—the answer was "nothing." The idea of the Buddhist young man was that the little devotees were indeed praying, but to nobody and for nothing. It is strange how extremes meet. The Buddhist child must *pray*. He seemed to think this perfectly natural, but he can pray to Nobody, and for Nothing. The ablest and wisest of philosophers cannot do without religion, but he may have an abstract Non-entity for the object of his worship, and Annihilation for the summit of his desire.

The third essay is entitled Theism. It discusses first the evidence for the existence, and then for the attributes of such a Being as God. This brings us into higher and pleasanter regions of thought. He first considers the argument of cause and effect. He dismisses at once as altogether useless the *a priori* arguments as they are called. They seem to us, indeed, much more worthy of consideration than he allows them to be. The notion that there must be some corresponding reality to the idea of perfection within us (perfection embracing the idea of existence) is not the more *petitio principii* that he imagines it to be. It may not be conclusive, but neither are the arguments, which he recognizes as valid, allowed by him to be certainly conclusive. The fact is that, as has been lately felt, it is in the convergence of the evidences, and their consequent accumulation of force, that the strength of natural theology especially consists. However, the *a priori* theories of Des Cartes, Leibnitz, (we might add the names of Anslem and S. Augustin) on these questions, do not come into the scope of our discussion. They are summarily dismissed by Mill, and his views are the matter under review.

I.—What strength has the argument, that the idea of causation implies a First cause? It should, indeed, be at once observed that the latest able reasoners have fully proved that the step from the notion of a series or chain of causes and effects to that of an Originator of that series differs, not in degree, but in kind from the previous generalizations. This seems felt, but is not clearly expressed by Mill. He observes, indeed, that with the modern theories of the Conservation of force, we have to recognize a permanent as well as changeable element in nature, and that this permanent element (as far as experience testifies) has no beginning, and therefore no Cause. If it be said that force implies volition, and that volition implies mind, and that the human mind implies a perfect creative mind, he denies the applicability of this reasoning to the facts of nature. He seems to us to eliminate the *facts* of our mind, or conscious will, too much from the province of experience, although in one place he states them to be our only certainties.

The idea of Origination in the will and in the mind of man is one of these facts, and this apparently is what gives us the real

idea of an original self-existing cause. We feel that we have in some sense a power of origination. It is true that we must, as Bacon observes, "obey nature that we may command her." But the results of human thought and will, the railroad, the electric telegraph, and all the whole realm of applied science and art, are felt to be in some sense original—and give us by analogy, and an analogy of experience, our only idea of a real originating power. How much more must this hold good in moral matters. Mill, however, concludes that the first cause argument is in itself of no value for the establishment of theism.*

He then considers the old argument from the Consent of mankind—or if not, of all of the wise and great among men: but this again is insufficient, because grounded on no experimental evidence. The argument from Consciousness follows. This we have already seen that he has rejected; this he denies that the subjective idea implies the reality of the objective idea. There does not follow a corresponding reality outside the human mind.

He then turns to that argument which he alone recognizes as having any force, *viz.*, the famous one from Design—and he takes the noted instance of the eye, and discusses briefly but powerfully the evidences of design in the eye—and he treats it as an inductive argument of some force.† "There must be some connection by way of causation between the cause which brought these elements together and the fact of sight. Therefore not sight itself, but an antecedent idea of it,—that must be the efficient cause."

To this argument he allows weight, but he considers it weakened by the theory of the "survival of the fittest." Nevertheless, making the necessary allowances, he infers that the adaptations in nature afford a "large balance of probability in favour of creation by intelligence." This is, however, (as, indeed, it is generally esteemed) no more than a probability, still it is probability. This is a weighty and remarkable declaration. The importance of the smallest probability, in a matter of such moment, has been demonstrated by Butler in his Analogy. We have never seen his reasoning refuted.

Mill advances then to a further important matter, *viz.*, the question what *attributes* are we warranted, by the evidence which nature affords of a creative Mind, in assigning to that mind.

His depth and originality of thought show themselves especially in the consideration of this subject. His conclusion appears to us very different from, and superior in logical power, to those theorists who would exclude altogether any notion of the Supernatural. Take perhaps the last utterance on this point by this school. "It is manifestly our first duty,‡ as it should be our supremest pleasure

* Page 153, ὁ γὰρ πᾶσι δοκεῖ, τὸν τὸν
ναί φημεν, Arist. Eth. Nic.

† Page 171.

‡ Supernatural Religion, II. 294.

to apprehend, as clearly as we may, the laws by which the Supreme Being governs the universe, and to bring ourselves and our actions into reverent harmony with them, conforming ourselves to their teaching, and learning wisdom from their decrees. Thus, making the Divine will, our will we shall recognize in the highest sense that God is ever with us; that His good providence controls our slightest actions; that we are not the sport of Satanic malice, nor the victims of fitful caprice, but are eternally cared for and governed by an *omnipresent immutable power* for which nothing is too great, nothing too insignificant, and in whose Divine order a fitting place is found for the lowest as well as the highest in the palpitating life of the universe." The words which we have italicised are those which in Mill's view give an idea of the universe which revolts his judgment.* Such a Being would seem to Mill almost as if the blasphemous flattery of Lucan were fulfilled and a Nero exalted to the dominion of the universe. He maintains that the very idea of Design implies limitation, and excludes omnipotence. We have already seen what nature becomes in his opinion under such a view—and surely his opinion is far more coincident with the facts of experience.

One groan of pain, one tear in a baby's eye, seems to us to contradict that simply optimist notion of nature and nature's God. Eliminate the supernatural, and nature by herself becomes a great crushing machine exterminating pitilessly all who come beneath her sway.

How then does Mill describe God? "A Being of great but limited power, how or by what limited we cannot even conjecture, of great and, perhaps, unlimited intelligence, but perhaps also more narrowly limited than His power; who desires and pays some regard to the happiness of His creatures, but who seems to have other motives of action which He cares more for, and who can hardly be supposed to have created the universe for that purpose alone."

Thus we are brought to the next great question of religion—a future life—Immortality.† Once for all we must say it is impossible to abstract or condense Mill's arguments satisfactorily. Each sentence is a world of thought, each conclusion an elaborate epitome of volumes. We can only give the results as he expresses them. He thinks that from natural theology there is no evidence in favour of immortality.

But,—and this is most observable,—he recognizes the possibility of Miracles, he allows the possibility of Revelation; of course under many limitations and conditions, and almost as if the consent was extorted from him by his truth of character, and force of logical

* See Lucan's Pharsalia I. 40.

† Page 196.

insight. Therefore he next discusses Revelation; he does not (as so many now do) fling the idea away with contempt. On the contrary he allows it to be not improbable, though still uncertain, that a Revelation has been given.

Here we have another most important acknowledgment, taking again into account the argument of the immense practical consequence of even the slightest degree of possibility in such a matter.

If, then, he declares that the whole domain of the Supernatural is removed from the region of Belief, he yet establishes it in that of Hope—using there the word Belief in the sense of certainty from demonstration. It follows that we should nobly labour for perfection, and be fellow-workers with this divine Being.* Moreover, he declares that “this idealization of our standard of excellence in a person is quite possible, even when that person is considered as imaginary. But religion since the birth of Christianity, has circulated the belief that our highest conceptions of combined wisdom and goodness exist in the concrete in a living Being, who has His eyes on us and cares for our good.”

He goes further: “the most valuable part of the effect on the character which Christ has produced, by holding up in a Divine Person a standard of excellence and a model for imitation, is available even to the absolute unbeliever and can never more be lost to humanity. For it is Christ rather than God whom Christianity has held up to believers, as the pattern of perfection for humanity. It is the God Incarnate more than the God of the Jews or of nature who, being idealized, has taken so great and salutary a hold on the human mind.” We do not use the words in the same sense with Mill, nor do we own the disagreements which he maintains; but surely we have here a grand, and perhaps, half-unconscious witness to “the inheritance of faith” in which we live. We cannot imagine any real limit to the divine power or wisdom except such as He himself ordains. But Mill is true to himself. So in these words we surely hear echoes of Divine truths: “We are saved by *Hope*, but hope that is seen is not hope.”† “The creature is made subject unto vanity not willingly, but by reason of Him that subjecteth the same in *Hope*.” “The whole creation groaneth and travaileth in pain together until now.” There is an ordered march design and purpose in the movement of the universe. There are other ends beside the mere display of beneficence in that world which is ‡ “to the praise of the Glory of His Grace, wherein He hath made us accepted in the Beloved.§ Having made known to us the mystery of His will

* Page 250.

† Eph. i 6.

‡ Rom. viii. 24, and viii. 30, and see whole passage.

§ Eph. i. 6-9.

according to His good pleasure which He hath purposed in Himself that in the dispensation of the fulness of times, He might gather together in one all things in Christ, both which are in heaven and which are in earth even in Him." There is the command as the result of our mercies, to be "fellow-labourers with God." Christ goes on "conquering and to conquer," and the white robed armies follow after in order and array similar to His. Life is a warfare, and "to him," *He says, "that overcometh will I give to sit with Me on My throne, even as I overcame, and am set down with My Father upon His throne." Surely we have here the practical solution of the enigmas of life corresponding to that which philosophy desired and dreamed of. But the subject would require a volume.

We cannot enter into Mr. Mill's ideas of the contradiction between the Old and New dispensations, between the Synoptic evangelists and S. John, between the Gospel of Christ and that of Paul. But while embracing the full faith of Revelation, the heart must be cold which cannot enter into and sympathise with the difficulties and trials, the noble aspirations and purposes, which amidst some great discords, make up a grand hymn of life out of the most antagonistic materials. What else could have been expected from so powerful and burning a mind, cast from the first dawn of its intellectual life into so tremendous and inexorable a mould, than some such sublime self contradiction?

Is it even presumptuous to follow the soul going out into that future in that ill-defined but quickening hope—to imagine how that eagle eye may at last sink, and that daring forehead bow, and as the full light of truth shines out behind the veil, how the spirit may at last recognise in all the fulness of Godhead and Manhood, Him whom, however imperfectly, he regarded as his ideal. When the great truths rise up before him in all their majesty, may not the great Sceptic, like the sceptical but penitent Apostle, be ready to fall down and worship crying "my Lord and my God?"†

* Rev.

† S. John, xx. 28.,

ART. VII.—THE BRAHMA SAMAJ. (*Independent Section.*)

- 1.—*Brahmic Intuition.* By the Rev. S. Dyson : 1866.
- 2.—*The Brahma Samaj Vindicated.* 2nd Edition : 1868.
- 3.—*The Brahma Samaj of India : A Lecture delivered at Dehra Doon :* 1870.
- 4.—*Deism and Theism ; or, Rationalism and Faith :* 1869.
- 5.—*Essential Principles of Brahma Dharma :* 1873.
- 6.—*The Unreasonableness of Brahmaism.* By B. L. Chandra, 2nd Edition : 1873.
- 7.—*Brahmic Dogmas, in five Parts.* By the Rev. S. Dyson : 1874.

THE writings, whose titles we place at the head of this article, extend over a period of several years, and form important stepping-stones along the recent history of the Brahma Samáj in India. We do not propose to enter into a detailed criticism of any of these writings, but shall devote some attention to the subject with which they all profess to deal. The Brahma Samáj is, in some respects, the most important, indigenous, religious movement in India, and its future history must be a matter of considerable interest to all reflecting minds. All friends of progress and of truth would like to see the supporters of this movement taking a position in their native land worthy of those who profess to be seekers after and promoters of the truth. It is admitted on all hands that if the millions of India are to be civilized, it must be through the influence of reformers who have sprung up from amongst themselves. The influence of foreigners may do much in the way of stimulating and directing the efforts of the people of India ; but it is only the efforts of the people themselves which can be effectual in bringing about such a change as can deserve to be called a national regeneration. We propose to direct our reader's attention to the present condition of the Samáj, and to offer some reflections which may enable those who have not paid much attention to the subject to get an intelligent view of the Bráhmie position, and may, perhaps, be of some service to the Brahmists themselves.

When the Brahma movement was first brought prominently before the public, a great deal of hope was entertained as to its future advance on the road towards truth ; but now the novelty of the movement has departed, public interest in it has flagged and people are not so sanguine as to the good which it is destined to accomplish. A great deal of work, however, has yet to be done

in India, and the Brahma Samáj has it in its power to do a large share of that work if it only has the sincerity and the honesty and the life which are necessary to the accomplishment of anything truly great.

The permanence and vitality of any movement depends to a great extent upon the *truth* intellectual and moral involved in it. For notwithstanding the widespread depravity of human nature, there is in the human mind an inherent love of truth; and any system will naturally continue amongst men in proportion to the amount of truth contained in it. It is a matter of importance therefore to the supporters of any system or movement that they should examine carefully the nature of their foundations, to see whether they have a basis which is really capable of supporting their superstructure.

The most vigorous attack against the Brahma system which has been made has been conducted by the Rev. S. Dyson, and is to be found in the various pamphlets of which he is the author. That learned and able writer has examined both the basis upon which Brahmaism rests, and the superstructure of dogma which has been erected upon it. There is a nervous vigour and sharpness in Mr. Dyson's style of writing which is not likely to conciliate those whom he attacks, and which also renders it difficult for them to return a satisfactory answer. He has carefully studied the principles of Brahmaism, and brings to his criticism of those principles an accurate knowledge of European philosophy and theology, a firm but reasonable belief in Christian doctrine, and an earnest desire to forward the interests of what he believes to be the truth in opposition to what he believes to be error. Consequently those, whose principles he is criticising, need not expect, and do not obtain, any quarter in the attack which he conducts. Whether this attack will cause any modification of their principles remains to be seen; if it leads them to examine more carefully into the foundations of their faith, good service, we hope, will be done to them, to India, and to the cause of truth.

The stand-point from which Mr. Dyson criticises the Bráhmie basis and dogmas is that of a moderate Christian orthodoxy. Assuming, as nearly as possible, his point of view, we propose to examine the principles of the Brahma Samáj, referring where necessary to recent publications concerning them. And we shall find it convenient to divide our examination into two parts, in the first of which we shall examine the foundation on which Brahmaism professes to rest, and in the second we shall consider the superstructure of intellectual or ethical doctrine which has been erected upon that foundation.

In "Essential Principles of Brahma Dharma," published in 1873 under the authority of the Brahma Samáj, the source of the

Brahmic principles is thus described: "The true scriptures written by the hand of God are two—the volume of nature, and the natural ideas implanted in the mind. The wisdom, power, and mercy of the Creator are written in golden letters on the universe. We know Him by studying His works. Secondly, all the fundamental truths about God, immortality, and morality, are established in the constitution of men, as primitive and self-evident convictions. Intuitive faith is the root of Brahmaism." This statement of the basis of Brahmaism is but slightly different from that which has appeared in their previous publications. The works of God in the universe are added to the intuitions of the human mind as the revealers of the nature and will of God. But it is admitted by everyone, whose opinion is worthy of consideration, that the objects and wonderful contrivances, and laws of nature speak to us of God *only after* we have imposed upon them conceptions of God taken from our own minds. No human being ever saw God in the universe, until his own imagination put his conceptions of God into the universe. This addition, then, of the works of the universe as the basis of Brahmaism does not extend that basis in the slightest degree. And we are thus free from the necessity of bestowing any further consideration upon this extension of the Bráhmic foundation.

The principal basis upon which Bráhmists attempt to establish this faith, called by them intuition, has been ably and thoroughly examined by Mr. Dyson in his pamphlet upon "Brahmic Intuition," and we shall not attempt in our short space to discuss the subject as fully as he has done. There are few words of the vocabulary of philosophy which have been so much abused as this favourite of the Brahmists, intuition. Almost every philosopher and theologian will admit that we have certain amount of intuitive or immediate knowledge. Certain objects and certain relations are known to us immediately, and our knowledge of them is our only guarantee of their existence and character. But it requires the greatest care joined with a considerable degree of critical ability to enable one to distinguish between that knowledge which is intuitive and that which is inferred, derived or complex. The uncritical common sense of the older writers of the Scottish school, as Reid and Stewart, included amongst the "original principles of our constitution," many elements which have no more right to be called original than our present belief in the sphericity of the earth. That eloquent Frenchman Victor Cousin, who has written more nonsense about spontaneous convictions, original principles, *et cetera*, than any other modern European writer, declares to be intuitively known to him, what Sir W. Hamilton, who is by no means behind hand in the number of his primary intuitions, does not admit to be known at all. But we must confess that we

have seen nowhere else such utterly reckless statements regarding the alleged contents of our intuitions as are to be found in the Bráhmie writings. . . . "All the fundamental truths about God, immortality and morality are established in the constitution of men as primitive and self-evident convictions." (*Essential Principles*, p. 2.) Really this is more than might have been expected even from an exuberant oriental imagination. Surely, if all this is given to us in "primitive and self-evident convictions," we ought to expect as little difference of opinion amongst men regarding "God, immortality, and morality" as we actually find amongst them regarding the principles of geometry. But we should say that not even a Brahmist with all his oriental extravagance would venture upon the assertion that there is as little difference. We may, perhaps, have misread the Brahmic "*Essential Principles*." We observe the statement is made regarding *fundamental* truths. And possibly the truths regarding God immortality and morality which are *fundamental*, are very few in number and simple in their character. But this statement is taken from a little pamphlet entitled "*Essential Principles of Brahma Dharma*" and we naturally conclude that the principles contained in it are intended to be included in the class of "primitive and self-evident convictions." On the first page of this pamphlet we find: "God is the first cause of the universe. There was nothing before. By His will and creative power He created all objects and beings, and He upholds them as their primary power and life. He is spirit not matter. He is perfect, infinite and eternal. He is omnipresent, omnipotent, omniscient, all-merciful, all-blissful, and holy. He is our Father, Preserver, Master, King, and Saviour. He is one without a second." The next paragraph gives us the Brahmists, "primitive and self-evident convictions" regarding immortality. "The soul is immortal. Death is only the dissolution of the body; the soul lives everlastingly in God. There is no new birth after death; the life hereafter is only the continuation and development of the present life. Each soul departs from this world with its virtues and sins; and gradually advances in the path of eternal progress while realizing their effects."

Now we are not at present concerned with the consideration of the *value* of these opinions regarding God and immortality, or their coincidence or difference with the corresponding doctrines of other religious systems. What we wish to point out is, that if all these "convictions" are given amongst the intuitions of the Bráhmie consciousness, either they must mean something different by the word intuition than is meant by it in the philosophical writings of the present day, or their minds must be differently constituted from those of the rest of mankind, or they are so loose and inaccurate in their reasonings or their language, that it is a waste of time

to engage in discussion with them. As far as our present argument is concerned, it makes little difference how the generally received doctrines regarding God and immortality originated. No one, whose opinion is worthy of consideration, believes that such doctrines as those quoted above from "Essential Principles" are "primitive and self-evident convictions" of the human mind. Christians believe that the doctrines which they hold regarding God and immortality have been *revealed* at different times and in various manners during the past religious history of the world. Many who do not adopt the orthodox Christian view, and have given much attention to the history of religious opinions, believe that the current doctrines regarding God and immortality have gradually *grown up* out of cruder and more primitive beliefs in accordance with the ordinary laws of human mental and social progress. Amongst European philosophers and theologians there are many who place great importance upon intuition as a source of knowledge. But we know of none who, adopting such a crude uncritical method as that of the Brahmists, heap together in delightful confusion such a number of doctrines currently received amongst civilized people, and stamp them all with the common brand of "Bráhmie dogmas"—"primitive and self-evident convictions."

There can be no doubt but intuition is a most important source of knowledge, and a system of philosophy or theology which ignores it must be essentially defective. But those who claim more for intuition than can be maintained, only injure the cause which they are endeavouring to advance. And we would counsel the Brahmas, if they think our counsel worth listening to, to examine more carefully and critically the basis of their belief, and not to bring contempt upon such an important source of knowledge as intuition by crediting it with such a multiplicity of religious beliefs as they have collected together in their "Essential Principles."

II.—In proceeding briefly to review some of the "Bráhmie dogmas" we first give Mr. Dyson's classification which evidences a thorough and careful study of Bráhmie writings. "The doctrines of Brahminism thus comprised within the range of our enquiry will be classified as follows:—

I.—Doctrines of Brahminism distinctive *in themselves*.

II.—Doctrines of Brahminism distinctive *indirectly, in regard of the warrant on which they are professedly accepted*.

III.—Doctrines of Brahminism which are *verbal caricatures* of supernatural facts and doctrines of Christianity.

I.—Belonging to the first class we have, among others, the following dogmas, professing to be as Bráhmie principles, statements of (1) *facts* and (2) *facts which are "primitive and self-evident convictions."*

1. The supernatural altogether is an impossibility. This

sweeps away at one stroke both the facts and evidences of Christianity.

2. Prayer for spiritual blessings is efficacious, but prayer for physical blessings is *not*.

3. Forgiveness of man's sins by God is an impossibility.

5. Repentance is the punishment of sin, and no other is possible.

6. No sinner can be punished till he is conscious of his sin, and this consciousness depends upon his own free will.

8. Repentance which brings us back to God is the only atonement.

10. Hence, as every sinner must be adequately punished, *i.e.*, every sinner must adequately repent, therefore, every sinner must be saved. Punishment, repentance, and salvation are all the same process regarded from different points of view.

II.—Under the second head there are:—

1. The Unity, Personality and Perfections of God.
2. The Fatherhood of God and the Brotherhood of man.
3. Man's immortality.
4. The Christian doctrine of creation.

III.—Under the third head we have:—

1. Bráhmīc "Unity in Trinity."
2. Bráhmīc "Incarnation;" Bráhmīc "Revelation," Bráhmīc "Scripture," Bráhmīc "Inspiration," Bráhmīc "Kingdom of God," "Gospel," "Regeneration," "Redemption," "Atonement," &c.

These various doctrines are collected by Mr. Dyson chiefly from the lectures and addresses of Babu K. C. Sen delivered in England and in India. The most astounding fact connected with them is that they are all held to be self-evident and intuitive convictions of the human mind. And in consequence of the Brahmists holding this perfectly insane position, Mr. Dyson obtains an easy victory over them. The position of the Brahmist appears to be something like the following. They have been awakened from the darkness and superstition of Hinduism by coming into contact with Western intelligence and life. They belong to a proud and sensitive nation, and are unwilling to acknowledge the intellectual and religious benefits which have been communicated to them from without. They are especially unwilling to acknowledge in Christianity the source of the moral and religious enlightenment by which they are being influenced. They consequently wish to establish for themselves an independent basis on which to build the intellectual, moral and religious truths and principles which they have succeeded in imbibing.

They have read some of the popular European philosophers, such as Cousin, and are fascinated with their eloquent declamations about eternal truths and self-evident convictions. They have read some of the popular free-thinking theologians and are delighted with the assistance which they give them in their attacks upon orthodox Christianity, and in building up something which will be distinctive of themselves. Familiar as we are with the loose inconsequent thinking and the declamatory tendencies of young Bengal, we can easily understand how, out of these elements, there should proceed the incongruous medley of "dogmas" which Mr. Dyson so severely criticises.

Without entering into a detailed review of Mr. Dyson's criticism of the Bráhmīc positive dogmas, we propose to refer briefly to the Bráhmīc doctrines regarding (1) The Supernatural, (2) Prayer, and (3) Divine forgiveness.

1. The Brahmists are by no means alone in denying the possibility of the supernatural. Various classes of thinkers have made the same denial for various reasons. Spinoza and the pantheists have denied the possibility of the supernatural upon the ground that God is immersed, as it were, in the universe, forming an essential element of it, working in all its forces in accordance with its laws, and consequently incapable of interfering with it *ab extra*. This position we can understand, and are able to put ourselves intellectually into the stand-point of those who maintain it. But this is not the position of the Brahmists. They profess to believe in a personal God, the Creator and the Governor of the world.

There are others again who do not exactly deny the possibility of the supernatural, but who affirm their disbelief in it upon the ground that the uniform experience of mankind has led to such a strong belief in the uniformity of law, that the human testimony adduced in favour of the supernatural fails to shake the opposing belief. This is the position of many modern scientists whose minds have been engrossed with the study of physical phenomena, where law is seen most clearly to prevail. But it cannot for a moment be pretended that the Brahmists ground their denial of the supernatural on this basis, since they belong to a race notoriously inexpert at physical sciences, and, moreover, they profess to ground all their doctrines upon the self-evident principles of the human constitution. We do not at present express any opinion as to the possibility or impossibility of the supernatural; we simply point out that we do not see any reason why the Brahmists should deny its possibility. They profess to base their doctrines upon the principles of the human constitution, and we do not know of any of these principles which, apart from experience and reasoning, could possibly be the foundation of such a denial.

Moreover, they believe in the existence of a personal God, not immersed in the universe, but the Creator and Governor of the universe; and we find ourselves incapable of understanding the mental constitution of those who, from this stand point, conclude that the supernatural is impossible. We should recommend the Brahmists to seek for greater consistency in their system of doctrines.

2. The Brahmists deny the efficacy of prayer for physical blessings, but admit its efficacy for spiritual blessings. They base this denial and this admission upon the self-evident convictions of the human mind. At the same time with this denial and this admission there is held the existence of a personal God who loves the rational beings whom He has created.

Now, in the first place, we fail to see how they can consistently deny the one and admit the other. We are not aware of any self-evident conviction which makes such a distinction between the physical and the spiritual. In fact these two elements of our nature are so intimately connected that even in our advanced period of the world's history we sometimes find it difficult to distinguish between them. And certainly in more primitive conditions of human society we find no trace of the presence of the self-evident convictions of the Brahmists. Primitive man seeks chiefly after the physical, and has not the slightest doubt but his deity hears and can answer his prayers. And as we trace the history of man and reach more cultivated and enlightened times, we find certainly changes in human conceptions of God's nature, but we do not see the working of those intuitions to which the Brahmists appeal. As long as men continue to believe in the existence of a personal God, who is the Father of His rational creatures and the Governor of His universe, there appears no sufficient reason why they should limit His power or His goodness in the way in which the Brahmists do in their doctrine of prayer.

And as a matter of fact those who deny the efficacy of prayer, implicitly deny the existence of a personal God and Father. If there exist a being independent of the universe who holds to men a relation something analogous to that of a father to his children, there appears nothing in the nature of the case or in our mental constitution to forbid us asking Him for any blessings, physical or spiritual, which may be for our good. If the Brahmists, therefore, wish to be consistent, they must modify *either* their doctrine of a personal God *or* their doctrine of prayer.

3. According to the Bráhmie writings, divine forgiveness of human sin is impossible. This also is based upon the fundamental convictions of the human mind. But the connection between the basis and the super-imposed doctrine we fail to see. The Brahmists, in imitation of some western writers, are fond of inveighing

against the opinions, supposed to be held by Christians regarding divine anger and divine forgiveness, as being anthropomorphic and unworthy of God. Anthropomorphism is the bugbear of many who wish to differ from ordinary received conceptions of God's nature. But those who ridicule anthropomorphism should ask themselves the question whether it is possible in any other way to form conceptions of God at all. God is not directly known to us, and we can only form conceptions of that which is not immediately known by clothing it with forms taken from the known. Our own human nature is the highest and noblest nature with which we are directly acquainted ; and when we attempt to think of the Creator and Governor of the universe, it appears to us that we can do so most worthily by forming our conceptions after the model of the highest order of beings with which we are acquainted. We may and ought to be ready to admit that our conceptions thus formed are imperfect and inadequate ; but if we try to think of a personal God at all we can do so in no other way than in that way which is stigmatised as anthropomorphic. A purified and reasonable anthropomorphism is not only the highest and best form in which we can conceive God, but it is the *only* way in which we can conceive *God as a personal Creator and Father*. If, then, we are to retain our belief in a personal God we cannot give up anthropomorphism in some shape or other. Nor are the Brahmists free from anthropomorphism in the conceptions of the deity which they present in their writings. They represent God as a *personal Being* who is filled with *love* to all the creatures of His hand. Now, here is unquestionably a *human* feeling attributed to God ; but with a strange inconsistency the correlative feeling which gives to love its meaning is denied to Him. God is capable of loving, but is incapable of being angry. Upon what self-evident conviction this distinction rests we are not aware. We have been taught that there are certain relative terms which have a meaning only with reference to one another ; and that there are certain relative feelings which similarly depend upon one another. And we feel ourselves incapable of understanding the meaning of the word love or of the thing either, without comparing it with its correlative.

We are perfectly willing to admit the difficulties in which we may be involved by anthropomorphism, but the very essence of our conception of *God as a personal Creator and Father* involves anthropomorphism of some kind or other, and if we retain the one we must retain the other also.

These considerations show the inconsistency of the Brahmists in denying the possibility of divine forgiveness of human sins. And we would seriously and candidly repeat our counsel to them to seek both for truth and for consistency, We are ready to

acknowledge the advance which they have made upon the currently received opinions of their orthodox Hindu brethren ; and if they are really sincere and earnest in seeking after truth we wish them every success. But unfortunately there is too manifest in their writings that inflated self-conceit and self-assertion which is the characteristic of shallow and superficially educated young men, and which is the most effective bar to all real progress.

We have now completed all that we intend to say regarding the Brahmic movement and Mr. Dyson's controversy with its promoters. There are many details of this controversy to which we have not alluded, and for which we must refer the reader to Mr. Dyson's pamphlets and the various Brahmic productions. We have brought out what appears to be the most salient points in dispute between the Brahminists and their critic, and given our own view regarding them. We conclude by expressing our hope that the young men of Bengal, who are being rapidly introduced to western thought and culture, will seek after truth with sincerity and earnestness, and will embrace it when found ; and especially that they will cultivate that humility and teachableness of spirit which is, perhaps, the most essential requisite for the attainment of both truth and goodness.

J.

ART. VIII.—POLITICAL ECONOMY AND FAMINE
RELIEF IN BENGAL.*

THE science of Political Economy has seldom had so much to answer for—or perhaps we ought rather to say, has seldom being so unjustly burdened with a responsibility which does not belong to it—as in the discussions of the past year on the subject of Famine Relief in Bengal. We all know that a similar fate has befallen, at some period of its history, nearly every one of those sciences which, like political economy, are distinctly of modern growth, and of which consequently the precise limits and scope have not been examined and ascertained by the controversies of centuries. Geology, for instance, within the memory of all of us has been currently credited, alike by scientific and by unscientific men, with the power and the will to upset many of those traditions of Biblical belief which Englishmen have inherited and fondly cherished; and we well remember a time when not a few feared to enter on the study of this most fascinating science, lest its knowledge might undermine their faith. Happily, we have long ago learnt that the testimony of the rocks is really God's own witness to the truth of the Bible. A man now-a-days is in no danger of being charged with inconsistency when he avows himself to be at once a geologist and a Christian; and geology may fairly claim to have become, in some points, an interpreter of the Divine oracles. Other instances of a like nature will readily occur to the mind of every

* Since this paper was written, Sir Richard Temple's Report on the Famine has appeared—a Statepaper of greater interest both to the student of political economy and to the philanthropist than any that has ever been published in India. As a record of marvellous difficulties gradually overcome by calm and provident statesmanship, backed up by indomitable resolution and energy, it reads in many parts like the *Anabasis* of Xenophon or some of the Peninsular *Despatches*. We believe that the unanimous verdict of the civilised world on the Famine-relief measures of 1874 will be one of unqualified approval, and that the account of the campaign will be received in time to come as that of the most glorious triumph of the British name in the

cause of humanity and civilisation; but, however this may be, we are quite sure that no true Englishman will be able to read the story without a thrill of national pride. It is satisfactory to us to find that not one word of that which we have written in this article needs alteration in consequence of the new evidence and the more perfect light thrown on the subject by Sir Richard Temple's narrative. Had it been in our hands before we commenced to write, we should have drawn from it many new suggestions and arguments, and a most valuable mass of illustrative matter; as the case stands, we have thought it best to content ourselves with numerous references and quotations in the form of foot-notes.

thoughtful reader. The late Archdeacon Pratt, in a work of considerable originality and acuteness,* dwelt at length on the pertinacity with which mistaken notions about the irreligious or immoral tendencies of scientific research retain their hold on the public mind; and attributed it (if we remember rightly) to the reluctance of many high-minded and religious men of science to dabble in the muddy waters of polemics. Something of the same kind must, we imagine, be the reason why we have heard of late so much of that hard and over-cautious side of political economy that would forbid all Government action in famine relief, for fear of certain possible evil consequences; and so little of the broader and more liberal teachings of the same science, that would strengthen and stimulate that action, for the sake of certain good results at least equally possible. We would fain see the cause of humane liberality† in this great national matter

**Scripture and Science not at variance.* By J. H. Pratt, M.A., F.R.S.

†We speak here boldly of *liberality*. We may possibly be told by cynical critics that the term is not applicable to the expenditure of a Government which dispenses public money as the trustee for the public, and must therefore be just, not generous, in its use of the trust-funds. But we speak only of that liberality (which is indeed the truest liberality) which measures an outlay not absolutely, but by its results—which sows liberally to reap liberally. The only fundamental difference between private liberality and public liberality lies in the fact that in the one case the harvest may rightly be, and often is, reaped by persons other than the sowers; in the other case, this cannot often be. As a rule, the harvest of public liberality ought to be reaped by the public; and the generosity of a Government, if it went beyond this, would generally be not liberality but dishonesty and a breach of trust. But even here, it must be remembered, that the phrase *the public* is to be taken in the most comprehensive sense of the term. It is not, for instance, to be restricted so as to include only *actual* tax-payers; every subject is either an actual or a possible tax-payer, and has an equal claim to consideration in either case—the tax-payers pay the taxes on

behalf of themselves and their fellow-subjects.

Again, it is not absolutely necessary that the harvest of which we have spoken be a material harvest. Take for example the twenty millions nobly spent by the English Parliament on the emancipation of the slaves. It is probable that one of the results of that measure has been the actual loss to the nation of a far greater amount than that represented by the mere vote; for West Indian property has been depreciated and West Indian trade well-nigh ruined by it. And yet who will deny that the national gain in honour and a clear conscience has much more than made up for that loss? It may be noted, too, that even in such cases—where no material gain is looked for—liberality is usually, like honesty, the best policy, even from the lowest point of view. It requires no great stretch of faith, in those who have investigated the question of the general relative value of slave-labour as compared with free-labour, to believe that the West Indian Islands will at no very distant date return to more than their former state of prosperity; and at any rate the English nation has the consolation of knowing that, if we have lost so much money by emancipating our slaves, the Americans have lost far more (in the disastrous Civil War) by retaining theirs

taken up by abler pens than ours; and we doubt not that it will be, both here and in England. But we feel that it behoves every true and earnest student of political economy—every economist who honestly believes that his favourite science is not really obnoxious to the charges of short-sighted inhumanity and selfishness brought against it by M. Comte and his followers—to speak out boldly, and clear it as far as may be from the damaging connexion with the veiled Malthusianism* and heartlessness of the *doctrinaires* by whose mistaken teachings it has of late been discredited. It is in this spirit and with this view that we venture to submit to the public the following remarks on the relief-measures adopted in Bengal during the recent distress. Though they contain nothing that is original or even novel, it is hoped that they may not be entirely without their use at this time, in helping to maintain the cause that is the right, because the good and just one. They are, at any rate, the results of careful and earnest thought on the part of a patient observer, who, though neither directly nor indirectly concerned in the relief operations, has watched with the deepest interest the whole progress of those operations from their inception to their recent glorious issue.

The past year has seen, in the provinces constituting the Lieutenant-Governorship of Bengal, one of the grandest struggles and one of the most brilliant triumphs ever chronicled in the annals of civilisation. The year came in dark with the shadow of an

for a time, and have come to the same pass at last.

The fact is, the theory of the "trusteeship" of Government is one that is very liable to be misapprehended; it is far better to regard the Government as the incarnation of, rather than the trustee for, the people at large. We should accustom ourselves, in discussions like the present, to think of the body politic as an individual; and then it will be obvious that the Government may rightly do that which we should applaud in such an individual.

* We wish to guard ourselves against the danger of being supposed, by the use of this word, to impugn the justice of the doctrines that are usually (though not quite correctly) supposed to have been first taught by Mr. Malthus. As long ago as the time of good old Master George Herbert, the value of some efficient check on population was clearly recognised by philosophers; though

they were (even in those simple times) hardly more agreed than their successors are at present, about the way in which the check may be legitimately applied. The theory is, however, stated plainly enough in a curious apophthegm in the *Jacula Prudentum*. All that the Haileybury Professor did was to determine more clearly the proportion between the rate of increase of population and that of subsistence, and to point out the advantages of certain moral restraints on over-population. But it is the fate of the political economist to be held responsible, in vulgar estimation, not only for the general accuracy of the laws laid down by him, but also for the misery or crime that may be caused by the unseasonable application of those laws to cases beyond their true scope; and hence, we believe, the epithet *Malthusian* has already acquired, in popular language, the meaning in which we have used it.

impending national calamity, the prospect of which was enough to chill the hearts of the stoutest workers, and almost enough to sober or soften the most thoughtless and the most cynical idlers. The workers were warmly, and even fiercely, disputing amongst themselves as to the precise strength of the resources with which the country would enter on her great trial, and as to the probable extent of the danger. On the other hand, as it was in the days of Noe so it has been in our days; the triflers and the cynics pooh-poohed the whole matter, or counted the economic gain of a rapid diminution in the numbers of a redundant population. Even in this camp, indeed—if one might judge from the utterances of the newspapers and from the talk of the dinner-tables—there was perceptible a wide-spread and ill-concealed uneasiness; but men paltered with their consciences, and smothered all feelings of responsibility in a matter of great public moment, by unscientific appeals to the science of political economy, or by throwing all responsibility on the Governments of India and Bengal. All were, indeed, agreed that it was the duty of the Viceroy and the Lieutenant-Governor to see that the millions died not, as they had died in Orissa in 1866. We do not remember to have read in any paper, Indian or English, or to have heard from any person, a single statement that could possibly be construed into an admission that the Government would be held blameless if any great loss of life were to occur. "But," says A., "Government must not sell, much less give away, grain; for that would be interfering with private trade, and though Government can do more than one merchant, it cannot do nearly as much as all the merchants combined," B. declares: "It will never do for Government to provide means for employing and feeding paupers: for that would be to demoralise the people—and the limit of pauperism will only be reached when there is no other class left, capable of paying the taxes to support a nation of paupers." C. adds that (though no lives are to be sacrificed, *bien entendu*!) "if we once begin this sort of thing, there will be no end of it; there will soon be a perennial famine, for the whole people will refuse to work if they are saved from starvation by a paternal Government; and the only really efficient check on population being lost, the whole produce of the land of India will soon be insufficient to support its teeming population." D. concedes that "there may possibly be no harm in the Government bringing grain from a distance to the scene of scarcity; but is certain that the possible loss on such an operation should not fall on the public revenues, for this would be in effect to tax the frugal for the support of the improvident." E. sapiently declares that "it is the plain duty of the Government, not to *relieve* famine, but to *avert* it, by irrigation-works, by roads," by this and that plan; when we ask "and in the meantime?"—E. is

silent, or declares that there ought not to be any "meantime" in the question—which certainly does not dispose satisfactorily of the fact that there is a "meantime," and that the "meantime" is for the present the most important consideration.

And so on through all the rest of the letters of the alphabet. Each one showed clearly enough that the Government ought not to attempt any remedial operations in a case of actual famine; and some of the transcendental arguments brought forward would have equally discouraged preventive measures. Even the least violent of these anti-humanitarian philosophers refused to approve of Government action, until such proof of its absolute necessity had been adduced as could not possibly be obtained until after the event, when all remedial measures must have proved futile. And yet not one dared say plainly, that our rulers would be held blameless, in the sight of God and man, if a large loss of life were to occur in consequence of the "scientific" inaction which was so persistently urged upon them. In other words, these philosophers could not but perceive that the scientific laws, of which they were the apostles, must become dumb and inoperative in the actual presence of the Angel of death mowing down the millions of the people; that, in such an extreme case, laws repugnant to humanity are also repugnant to common sense and therefore untrue; and yet, with the blindness of fanaticism, they were unable to see that the mere possibility of such a contingency proved their boasted laws to be not eternal and immutable verities as they appeared vainly to suppose, but nothing more than mere formulæ—as rigidly exact in themselves as the most perfect mathematical formulæ, but functions of many variables, and therefore depending for their value in any particular case on the particular values of the variables. We will briefly endeavour, for each of the formulæ cited above, to assign their true value to the variables, and in that way to evaluate the formulæ themselves.

It is not necessary for us here to do more than refer to the caution, that should be impressed on the minds of all young students of political economy, that that science, when it teaches us the laws that regulate the increase of wealth, does not necessarily recommend us to go immediately and increase our wealth, either as individuals or as communities, in accordance with those laws and regardless of all other considerations. When Mr. Malthus urged the necessity of public attention to the law that, other conditions being the same, the material prosperity of an advanced community will largely depend on the efficiency of the checks on population, he neither wished nor expected his readers to go straightway and exterminate their neighbours, to emigrate *en masse*, or even to submit to a life of celibacy for the good of the public. He neither wished nor expected any Govern-

ment to countenance or even to permit offences against humanity on this score. That the teachings of his school have not been without their due effect on English legislation and administration, is proved by the existence of an Emigration Commission; that they have not been allowed to over-ride the claims of humanity (which, indeed, they were never intended to over-ride) is shown by the great system of Poor Law relief which is maintained in England, with the applause of all, at a cost of something more than eight millions annually to the rate-payers, or an addition of about twelve per cent. to the ordinary taxes of the country. We say nothing here of the vast machinery of the Friendly Societies and Trades Unions, which is sustained by the working-classes alone by self-imposed taxation, partly with similar aims; though the recent development of this machinery has done much to deprive the taxation of its voluntary and provident character, and has therefore tended to assimilate it to a poor-rate levied only on labourers. It will be readily seen that the bulk of the annual expenditure under the Poor Law in England is open to all the censure that has been directed against Famine Relief in Bengal; and yet it has not shown any tendency to increase beyond all limit, nor are the poorest classes as yet utterly demoralised by its operation. It is true that the system does not allow the surplus population to be cleared off, so that the ship of the State may be (to use a now famous simile) "like a frigate cleared for action." It is true that it does not say to the poor man, 'Fortunate or unfortunate, provident or improvident, you shall die if the time of scarcity comes on you before you are provided with a sufficient reserve to meet it.' In a word, it does not conform to the hard and fast letter of the law, as laid down by our friends the doctrinaires;* and yet it has produced none of the ill-effects of which we have heard so much of late. Hear what the *Westminster Review* says of the present working of the Poor Law in England:—

Archbishop Trench, in his work on English synonyms, defines pauperism, in distinction from "poverty" and "indigence," as the "being maintained in idleness by public charity"; and he speaks of that charity as "forced."† No doubt this reflects the generally realised conception of a pauper, varying to the mind's eye through every shade, from sturdy ruffianism to the feeble-

* And something might be said in answer to these *doctrinaires*, even granting their own hard and fast law. Sir Richard Temple (*Famine Report*, page 63) points out that "dominating all these considerations there is the moral principle that it is, in the last resort, the duty of Government to save the lives of its people;" but he also takes care to show that "the loss of life and the diminution in

production which must have ensued," if the Famine had been allowed its course, would have far more than counterbalanced the economic advantages of a heavy mortality, on which the pseudo-Malthusians are so fond of harping.

† Archbishop Trench here speaks with that intolerance of pauperism which befits a political economist.

ness of emaciation. But maintenance in idleness, the typical pauperism, in short, of public disgust, could hardly, we think, be traced in the following analysis of the pauperism reported for July 1st, 1873. Total number receiving relief, 822,000, composed as follows:—

Children under 16 ...	...	...	...	275,838
Aged and infirm adults permanently incapacitated from working ...	...	...	...	384,468
Adults, lunatics, &c. ...	...	...	...	50,284
Total unable to work ...				710,590
The balance is made up as follows:—				
Women (most probably widows) ...	...	...	...	87,409
Adult males (most of them suffering from temporary sickness) ...	...	...	...	22,238
Total of those temporarily unable to gain a living				109,646

The small remainder consists of vagrants, many of whom may be honestly seeking a better market for their labour and require a little help by the way.

This is the true rendering of the terrible account of English pauperism. The money cost is great, but the class supplying the paupers itself contributes to their keep.* The moral turpitude is small; for no direct responsibility can fairly be held to attach to seven-eighths of the entire number, and something may be said to redeem the bulk of the residue.

If Archbishop Trench's definition of pauperism be correct, the term "pauper" is wrongly applied to the whole 822,000 persons receiving relief; for there is nothing on the face of the returns to show that to more than 1,339—the number of adult males relieved *on account of want of work*—could the statement "maintained in idleness" be applied. Children under sixteen are not moral agents in the eye of the law; lunatics are clearly exempt; and as Society is not yet prepared to proclaim that "age is unnecessary," or that infirmity is a crime, Society ought to tolerate with a good grace what cannot be prevented.† Limiting our judgment to the direct issue of want, while freely admitting that precision ought to have been exercised, and that responsibility attaches to collateral relationship, we yet cannot condemn widows struggling to support a family when suddenly deprived of the support which naturally comes from the labour of the husband and father. Nor can we visit harshly the temporary helplessness of a workman when actually prostrate with sickness; or justify the passing-by on the other side, when even a trades-unionist, or an advocate for shortening the hours of work, is struck down by calamity or makes a false calculation of means to an end.

Such is the character of Poor Law relief in England at the present moment, after many years' experience of the present law, and after the lapse of centuries during which it has been held to be an established and unquestionable rule of English polity, that no Englishman shall be allowed to die for want of food. We have quoted the account at length to show that, in England at any

* With our land-revenue and our salt-tax, who will say that "the class supplying the paupers" in a Bengal Famine, does not "itself contribute to their keep?"

† If this statement is true, our ultra-Malthusians in Bengal are evidently at variance with "Society"; they will doubtless say, "so much the worse for Society."

rate, a system of national assurance against starvation may be worked without either demoralising the people, unduly extending the limits of pauperism, destroying private charity and providence, or taking away all checks on over-population.

We shall, doubtless, be told that the circumstances of India are so widely different from those of England, that the same rule cannot be applied to the two countries. We shall be told that India is far poorer than England, and therefore less able to maintain the strain on its finances; that famines are of frequent occurrence in India, whilst they are almost impossible in England, where even widespread distress (like that of the cotton districts during the American Civil War) can only very rarely happen; that the English are a particularly independent race and therefore not easily demoralised, whilst most Indians are exactly the reverse; that, for a similar reason, the encouragement of habits of frugality and prudence is not of the same importance in England that it is in India; that the perennial stream of colonisation that flows forth from England more than carries off all excessive population, whilst Hindus are singularly averse to emigration. We will endeavour presently to meet each of these objections in turn; and to show that the differences between the two cases are differences of degree, not of kind—that the same general principles apply to both, though possibly greater difficulties attend their application, and consequently greater care is required in the settlement of details, in the one case than in the other. It is sufficient for us here to have shown that, in one country, at any rate, a system of national assurance against starvation has been worked with great success, and with none of those evil results which have been predicted of Famine Relief in this country; we must now proceed to notice the general principles upon which such a system must be worked to obtain this success.

These general principles are laid down broadly, but with sufficient precision for our present purpose, by Mr. Mill in that chapter of his *Political Economy* which treats of the *Limits of the Province of Government*. We will take leave to quote at length the passage bearing directly on our subject:—

Apart from any metaphysical consideration respecting the foundation of morals or of the social union, it will be admitted to be right that human beings should help one another; and the more so, in proportion to the urgency of the need: and none needs help so urgently as one who is starving.

The claim to help, therefore, created by destitution, is one of the strongest which can exist; and there is *prima facie* the amplest reason for making the relief of so extreme an exigency as certain to those who require it, as by any arrangements of Society it can be made.

On the other hand, in all cases of helping, there are two sets of consequences to be considered; the consequences of the assistance itself, and the consequences of relying on the assistance. The former are generally

beneficial, but the latter, for the most part, injurious; so much so, in many cases, as greatly to outweigh the value of the benefit. And this is never more likely to happen than in the very cases where the need of help is the most intense. There are few things for which it is more mischievous that people should rely on the habitual aid of others, than for the means of subsistence, and unhappily there is no lesson which they more easily learn. The problem to be solved is therefore one of peculiar nicety as well as importance, how to give the greatest amount of needful help, with the smallest encouragement to undue reliance on it.

Energy and self-dependence are, however, liable to be impaired by the absence of help, as well as by its success. It is even more fatal to exertion to have no hope of succeeding by it, than to be assured of succeeding without it. When the condition of anyone is so disastrous that his energies are paralyzed by discouragement, assistance is a tonic, not a sedative: it braces instead of deadening the active faculties; always provided that the assistance is not such as to dispense with self-help, by substituting itself for the person's own labour, skill, and prudence, but is limited to affording him a better hope of attaining success by those legitimate means. This accordingly is a test to which all plans of philanthropy and benevolence should be brought, whether intended for the benefit of individuals or of classes, and whether conducted on the voluntary or on the Government principle. In so far as the subject admits of any general doctrine or maxim, it would appear to be this:—That if assistance is given in such a manner that the condition of the person helped is as desirable as that of the person who succeeds in doing the same thing without help, the assistance, if capable of being previously calculated on, is mischievous: but if, while available to everybody, it leaves to every one a strong motive to do without it if he can, it is then for the most part beneficial. This principle, applied to a system of public charity, is that of the Poor Law of 1834. If the condition of a person receiving relief is made as eligible as that of the labourer who supports himself by his own exertions, the system strikes at the root of all individual industry and self-government; and, if fully acted up to, would require as its supplement an organized system of compulsion, for governing and setting to work like cattle those who had been removed from the influence of the motives that act on human beings. But if consistently with guaranteeing all persons against absolute want, the condition of those who are supported by legal charity can be kept considerably less desirable than the condition of those who find support for themselves, none but beneficial consequences can arise from a law which renders it impossible for any person, except by his own choice, to die from insufficiency of food. That in England, at least, this supposition can be realized, is proved by the experience of a long period preceding the close of the last century, as well as by that of many highly pauperized districts in more recent times, which have been dispauperized by adopting strict rules of poor-law administration, to the great and permanent benefit of the whole labouring class. There is, probably, no country in which by varying the means suitably to the character of the people, a legal provision for the destitute might not be made compatible with the observance of the conditions necessary to its being innocuous.

Subject to these conditions, I conceive it to be highly desirable, that the certainty of subsistence should be held out by law to the destitute able-bodied, rather than that their relief should depend on voluntary charity.

In the first place, charity almost always does too much or too little; it lavishes its bounty in one place, and leaves people to starve in another. Secondly, since the State must necessarily provide subsistence for the criminal poor while undergoing punishment, not to do the same for the poor who have not offended is to give a premium on crime. And lastly, if the poor are left to individual charity, a vast amount of mendicancy is inevitable.

What the State may and should abandon to private charity, is the task of distinguishing between one case of real necessity and another. Private charity can give more to the more deserving. The State must act by general rules. It cannot undertake to discriminate between the deserving and undeserving indigent. It owes no more than subsistence to the first, and can give no less to the last.

Such being the general conditions under which a scheme of national assurance against starvation should be worked, it remains for us to examine ; *first*, whether these conditions can be satisfied in any system of famine-relief in India ; and, *secondly*, if so, whether they have been satisfied in the recent famine-relief operations in Bengal.

We have already pointed out that the results of the Poor Law system in England up to the present day justify Mr. Mill's belief, expressed many years ago, that the Law of 1834 was likely to work well. The people are saved from starvation, which, as Mr. Mill observes, is one of the primary duties of civilised society ; and yet they have been neither demoralised nor pauperised. This has been effected mainly by the device of giving assistance in such a manner "as to give to everyone a strong motive to do without it if he can ;" for instance, to take the most difficult case, that of the able-bodied pauper, such a man is not helped except on the condition of doing as much and as disagreeable work as would, *under ordinary circumstances*, entitle him to receive at least as much as (generally more than) the help actually given. It is, we think, obvious that there is nothing in the nature of things, to make this condition more difficult in India than it is in England. It has been satisfied in England ; we are therefore sure that it may be, and we believe that it actually has been, satisfied in India.

Let us examine in detail whether the differences between the circumstances of England and those of India, are really so great as to destroy the force of the analogy.

And first with regard to the relative wealth of the two countries. It is said, and truly said, that England is a rich country, and can therefore well afford to perform her moral obligations to her starving citizens ; whilst India is, undoubtedly, a very poor country. But it must be remembered that, if the worst came to the worst—if no measures be taken to prevent famines in the future, or if the measures taken prove to be futile—if the country has to go on providing funds for meeting frequently recurring famines, at the same cost as that which has been incurred in her recent first experiences—even under all these utterly improbable contingencies, the financial strain will be almost insignificant when compared with that of the Poor Law expenditure in England. We do not, of course, deny that the price, that the country must pay for what some may consider the luxury of a

clear conscience, must be (for the present, at least, and until wise preventive measures have been instituted and have commenced to bear fruit) a serious consideration to a poor country like India. The repudiating States of America found (for the time at least) repudiation cheaper than honesty; and provincial poverty was regarded by some as a fair excuse for provincial immorality. But this line of argument will never, we trust, be allowed in any portion of the British Empire. India is poor; but she can and will always be able to afford to pay her debts—not only her legal debts, but also those debts of conscience of which the obligation is, if possible, more binding in the eyes of all just and honourable men. Fortunately for Indian Finance, the social conditions of this country make it certain that we shall never (at any rate in any state of society to which we need look forward at present) require a chronic Poor Law expenditure like that of England;* and this immunity is probably, but most illogically, the reason why so many have been inclined to regard the short-spasmodic expenditure of Famine Relief as an act of grace, rather than one of moral necessity as it really is. It might be well if cynical critics would remember that, but for the remarkable vitality of private charity in this country and the strength of the ties of domestic relationship, the State might have been called upon either to support a *yearly* burden far larger than the cost of the late famine, or to face the execrations of the civilised world for clearing off its aged and sick like the useless lumber of “a frigate cleared for action.”

Closely connected with the point which we have just been discussing, is another objection that has been made, *viz.*, that in England famines are well-nigh impossible, whilst in this country they are of frequent occurrence, and are likely to happen more and more frequently as the population increases and outruns the pro-

* This opinion, based on the *à priori* argument from the social and religious feelings of the people of this country, has been fully borne out by the facts of the case. Sir Richard Temple (*Famine Report*, page 50) says:—“Those who remained at the beginning of autumn, that is, 1st to 15th September, were those who in ordinary times subsisted on private charity, and who had no livelihood of their own making. During the famine the classes who are donors of this charity being themselves in straits, ceased to support their indigent and infirm people, who consequently came upon State relief. But with the prospect

of returning plenty it became a matter of serious moment to send these poor people back to private charity. There was anxiety as to whether the ordinary donors would resume their charitable offices. However, so strong is the force of usage, almost amounting to religious obligation, that they must have begun again to give to the beggars and to the helpless their accustomed doles of food. These poor creatures have been discharged from State relief, and no harm has resulted to them. These circumstances are certainly creditable to the industrial classes.”

ductive powers of the country. To the former part of this objection, we give the answer of the last paragraph: England has a chronic pauperism far more costly than any series of Indian famines ever dreamed of by the wildest alarmists. The second part of the objection we regard as altogether fallacious; and the fallacy arises from the error of regarding the increase of population as a phenomenon by itself, without considering other attendant phenomena, which in this case will, probably, far more than neutralise the increase of population. In the first place, in India (notwithstanding its "teeming millions") there seems to be less immediate prospect than in most countries, of the population outrunning the productive powers of the country; for (1) in every province, even in Bengal itself,* there is an immense margin of cultivable land at present uncultivated, not so much because of any difficulty in the cultivation, as because the land already under cultivation suffices both for the wants of the cultivators and for the supply of all accessible markets; (2) for the same reason, the improvements in agricultural processes which in countries of more ancient civilisation have for so many centuries served to keep production ahead of population, are in this country in their infancy. The combined effects of these two conditions would seem to be to delay almost indefinitely the time when population can actually approach the limits set upon it by the productive power of the land. Hence also the difficulty that is found in inducing any considerable emigration from Bengal; the country does not need emigration. Moreover, in the second place, the facilities of transport are likely to increase at a far more rapid rate than the population, for a very long time to come; and the experience of the recent famine teaches us that with facility of

* We find unexpected proof of this statement in the Famine Report. Sir Richard Temple says:—"The agricultural statistics for Bengal have not been completed, but we know that, notwithstanding the great extension of cultivation during the last eighty years, there are still large areas of fertile soil awaiting the plough in Purneah, Dinagepore, Chittagong, Julpigoree, North Bhagulpore, and Chota Nagpore.

Along the whole northern border of the most populous districts (which last year were also the most distressed) of Behar and Bengal, stretches a wide strip of fertile land awaiting the approach of cultivation. To the south of Central Bengal lie the Sunderbuns, where even allowing suffi-

cient land for forest reserves, there are broad areas of rich waste available for settlers from the thickly-peopled districts of Bengal. To the west again of Behar and Bengal are situate the districts of the Chota Nagpore division, where the population is comparatively sparse, and where, perhaps, barely one-fifth of the land has yet been brought under the plough. In the rich valleys of Assam and Cachar there is ample space for any population that may overflow from Eastern Bengal for very many years to come. There are thus on all sides of Bengal wide areas of uncultivated land available for such surplus population as may migrate from the districts of Bengal and Behar.

transport, India will be even more secure from famine than England is, because less dependent on supplies drawn from foreign and possibly hostile sources.*

Fas est et ab hoste doceri. The objection discussed in the last paragraph, though utterly futile in itself, may well serve to suggest to the Government the best *preventive* measures that can be adopted to secure the country from the frequent recurrence of these catastrophes. It has been the fashion of late to cry up irrigation-works, encouragement of waste-land cultivation, and other devices for enlarging and securing the ordinary yearly food-production of the country. But the advocates of these measures forget that, if successfully carried out, they would tend *pro tanto* to cheapen the ordinary or normal price of food-grain throughout the country—a process which, in a vast agricultural country like India, could hardly fail to find compensation in and be neutralised by a reduced production in some other parts of the country. The proper use of such devices—as also of all encouragement of improved agricultural processes,† a measure having much the same economical effects—is to be found in their gradual and very careful adoption, as means of retarding the advance of population upon food-production, or in

* This is fully confirmed by the Resolution of the Government of India on Sir Richard Temple's Report. Lord Northbrook says:—"The food-supplies of India, including British Burmah, proved amply sufficient to meet the demand occasioned by the failure of the rice crop. Out of the total quantity of grain purchased by the Government, which amounted to 479,696 tons, only 54,300 tons were obtained from beyond British India. The rice exported from British Burmah in the year 1874 amounted to about 815,000 tons. Of this quantity about 290,000 tons were sent to Bengal, and about 470,000 tons to Europe—the exports to Europe having been only 33,000 tons less than in the previous year. The import of food-grains by railway from the North-Western Provinces and the Punjab is calculated by Lieutenant-Colonel Taylor to have amounted to 289,000 tons. This large export from Upper India did not greatly affect prices in the producing districts. The total quantity of food-grain carried into the distressed districts can hardly have been

much less than 1,000,000 tons."

Sir Richard Temple says (*Famine Report*, page 40): "It is a sign of the great resources of the Provinces of India that, notwithstanding the drain on Northern India and Burmah during the past ten months, the price of food in those countries is at the present moment about as cheap as in ordinary years.

† The law of the diminishing return to the labour and capital expended on high farming is of course familiar to all who have studied the subject, as well as to all practical agriculturists. In countries where plenty of new land is available, high farming is not only unprofitable to the farmer, but involves an actual loss to the community. Practically it is never attempted in such a case on any scale worth considering; and the only way in which it can possibly happen, is from its being forced on a country by Government encouragement. The economic laws affecting irrigation-works and the encouragement of waste-land cultivation are very similar to those affecting high farming.

other words of increasing the regular and ordinary food-supplies of the country so that they may keep pace with the increase of population. But what is it that protects England and all other advanced countries from all danger (except under circumstances that cannot now be foreseen) of actual lack of the means of subsistence? It certainly is not, and never could be, a large excess of food-production above the needs of ordinary years; no amount of Government encouragement could maintain such a state of affairs in any country for more than a year or two. It is simply **FACILITY OF TRANSPORT**—facilities for rapidly increasing import, and for rapid internal distribution. Sir Richard Temple's full appreciation of this great truth has been the crown and glory of his famine-relief administration,*—that which distinguished

* The account of Sir Richard Temple's transport-arrangements is, perhaps, the most interesting part of the report. To the vigour with which these were pushed on, immediately that the present Lieutenant-Governor was placed by the Viceroy in joint charge with Sir George Campbell, may certainly be attributed much of the success of the relief-measures. The transport of grain was itself made a great and most efficient relief-work, and gave life and food to thousands—an admirable illustration of that marvellous faculty for economising and utilising every possible form of working-power which has distinguished Sir Richard Temple's administrative career. We cannot refrain from quoting, for the benefit of those of our readers to whom the report may be inaccessible, the graphic description given of some of the transport arrangements:—

“The banks of the Ganges in Behar, which formed the great base of our transport operations, presented scenes of much animation. On the south bank temporary branches or sidings from the main railway line were constructed on to the very ridge of the high river-bank, where long sheds were erected for sheltering the bags of rice piled up in long series of heaps. Wooden slides were constructed, stretching down the steep bank, so that the bags might shoot straight from the goods platform to the deck of the steamers lying in

the stream. At that spring season violent winds from the west (hot as furnace blasts) blow over the broad river-bed (several miles in average breadth) from morning to evening, filling the air with dusty haze and obstructing navigation for all vessels save those propelled by steam. From eventide the winds subside until the morning. But navigation in the shifting and tortuous channels was impossible during the dark hours, so the work had to be done either by steamers laden together with their barges (called “flats”) or else by steamers towing country craft. It was interesting to see a steamer tugging against wind and stream a far-stretching string of, perhaps, twenty country boats. On the other side, the steamers would meet the Durbhunga Railway, which had been carried across the low sands to the water's edge, the steam vessel lying almost alongside of the railway engine. As the river rose gradually, the waters encroaching on the sands would drive back the railway line a few yards day by day.

On the north bank the main depôts could be descried from afar by the clouds of ascending dust. Day and night there was a ceaseless creaking and rolling of carts, incoming empty and outgoing laden. The great length of sheds which had been erected was often insufficient for the bags that arrived, which were then heaped into pyramids from 60 to 80 feet high.

it from the equally vigorous but not equally well-directed administration of Sir George Campbell—that which, with the wise direction and cordial support of Lord Northbrook, has (we firmly believe) contributed more than anything else to the glorious issue of the campaign.

We may here notice—*par parenthèse*, and in justice to many of those who joined at an early period of the famine in the outcry against a vigorous relief policy—that, doubtless, much of the opposition then evoked was to be attributed to the rash and unnecessary character of some of the measures that it was attempted to force on the cooler judgments of Lord Northbrook and his more immediate advisers.* Of these proposed measures, the one that

The lines of the carts extended continuously over many miles. A traveller might traverse say 20 miles of country and meet with uninterrupted strings of carts throughout the whole distance. Every one of the streams (which though very low were still running clear in that region) was blocked by cartmen stopping to water their cattle. Every one of the roadside mango groves, which abound in that quarter, was crowded with men and animals packed close together for temporary repose and shade. At evening the darkness of the groves would be lit up by the cooking fires. The roadways were cut by the cart wheels into ruts from two to three feet deep (called *leeks*). The carts could not move unless they followed the ruts. Fortunately, most of the carts were of an uniform build. But whenever carts of a different build came into the field, there actually arose questions of cart gauge, broad and narrow, and the transport department would be obliged to carve out fresh roadways wherein the carts of a particular breadth might work their own ruts.

More interesting still, perhaps, was the assembling and mustering of the many contingents of carts in the country around Durbhunga and Mudhobunnee during February 1874. The rough tracks and lanes form a network of communication in that region. Every line was covered by the bands of carts, each several thousand strong, converging from

every direction. The troops of men with their carriage gathered with alacrity at central stations. All seemed to understand the vital moment of the enterprise on which they were entering. At first the groves and tanks of the central stations afforded shade and water even for these masses. But soon these places became choked with the dust from the arid, friable soil trodden by countless feet. The foliage of the trees became encrusted and brown with layers of dust; the tanks would be drained to their dregs of fetid mud; the air was thick with particles of earth flying in the fervid blasts of the summer wind. Throughout the twenty-four hours of the day the business had to be prosecuted, and order had to be maintained among the masses of men, animals, and carts, whether at rest or in motion. Side by side with this were the field hospitals for the people and for the beasts—for the sun-stricken, the foot-sore, the over-fatigued, the exhausted, the ailing, and the sick. During the hottest hours of the day European officers on horseback were recovering stragglers, urging on the backward and encouraging the forward."

* In the debate on the Address in the House of Lords, Earl Granville well said, "On both sides of the House it is admitted that Lord Northbrook displayed ability, sagacity, and industry; and that he resisted clamour which made it all the more difficult for him to carry out his policy." In the debate in the Com-

attracted most attention was the prohibition of the export of grain from the distressed provinces; and as this was a question upon which it was absolutely impossible to arrive at a fair decision without a full knowledge of the extent of the other remedial measures within the power of the Government—and as, moreover, the proposal was one that ought to be entertained only in the last extremity—it is not to be wondered at if many thoughtful men were inclined to consider not only this extreme measure, but also the whole scheme of Famine Relief, as the result of a foolish panic. It was, of course, obvious from the first that, if the Government were certain of being able to obtain food-supplies from without, reasonably sufficient for the emergency, to prohibit exports (and thereby to maim the export-trade for years to come) would be very like killing the goose that gave the golden eggs. We now know that Lord Northbrook was fully justified in his determination not to allow his better judgment to be overborne by clamour or panic. The arrangements made by the Government of India for supplies from without, are now known to have been amply sufficient for all contingencies that might fairly and without extravagance be calculated upon.* Under these circumstances,

mons on the same occasion, the Leader of the Opposition said, "I cannot refrain from offering my humble tribute to the energy and fortitude with which he grappled throughout with that grave difficulty, and to the moral courage with which he took his own course, in opposition sometimes to authority of very great weight. He has done enough, and not more than enough, to save the afflicted provinces, without unnecessarily disturbing trade or demoralising the people by undue assistance." Similar sentiments were expressed, with hardly less warmth, by speakers on the Government benches. How fully Lord Northbrook has deserved all these praises, none know so well as those who have been themselves resident in the distressed country during its great trial.

* With what skill and prudence these forecasts were made by Lord Northbrook, the recently-published Report fully shows. The Government of India's Resolution says: "It will be seen from Sir Richard Temple's minute that a balance of about 100,000 tons of rice remained after the relief operations had been

concluded. To this extent the measures taken have been in excess of the requirements of the case. The responsibility for this excess rests entirely with the Government of India. Having to deal with so vast a population, whose support depended upon many uncertain contingencies, it would have been imprudent not to have been prepared to meet larger demands than those which were actually made upon the Government. If a substantial reserve had not been provided, the success of the relief operations would properly have been attributed rather to good fortune than to foresight. The experience of last year shows the necessity of such a reserve. In the beginning of September 1874 very great apprehensions were felt that the scarcity would be prolonged. This was only averted by a fall of rain at the very last moment when it could have been of use to allow the winter crops to be sown; and, if the rain had not then fallen, the rice in reserve would have been urgently required. It must not be forgotten that on previous occasions it has occurred that a second year of

any interference with the export trade was absolutely uncalled-for, and could only have been productive of unmitigated evil. Both in its immediate and permanent effects on the commerce of the country, and in its obvious tendency to diminish production, and consequently to impair the actual resources of the province and the ability to meet future calamities of a like nature—in every way, prohibition of exports could only be regarded as a measure of the very last resort. Moreover, if adopted at an early stage of the distress—when alone it could have been of any use in arresting export—it might not improbably have indirectly aggravated the ultimate distress; for one of its immediate results would have been to cause a heavy fall in prices, which would have produced a large and immediate increase in consumption. It is, however, happily, unnecessary to dwell further on these points now; Lord Northbrook has the double satisfaction of having decided rightly at first, and of having resolutely adhered to that decision until time itself has proved him right.

We return to the discussion of those objections by which it has been attempted to prove that political science may justify Poor Law Relief in England whilst it forbids Famine Relief in India; and we come now to the question of demoralisation. We have shown that in England, by the judicious arrangements of the Poor Law, a national system of assurance against starvation has been worked without demoralising the people or unduly extending the limits of pauperism. This has been effected by contriving that the condition of the person relieved should always be somewhat less desirable than that of the person who can contrive to do without relief; and the same method is evidently as applicable to India as to England. But, says the adversary, that demoralising process that falls harmless on the sturdy and independent spirits of Englishmen, exercises all its mischievous power on the weakly and spiritless Bengali peasant to whom self-reliance is at his best a thing unknown. This is obviously a statement that can only be proved or disproved by actual experience;* but we think that it

drought has followed the first." It will be seen from this statement, that about 80 per cent of the total provision of Government grain was actually consumed during the period of distress—nearly all having been issued before the 1st of October 1874. The balance of 20 per cent (or 100,000 tons) left unconsumed represents exactly such a margin as the most careful and judicious reckoner would wish to see, considering the enormous scale of the operations and the absolute uncertainty that

existed (even as late as the month of September) about the probable duration of the distress. We believe that every unbiassed observer will agree heartily with the Marquis of Hartington, that enough has been done, but not one jot more than enough.

* On this point Sir Richard Temple's report literally teems with the most valuable and conclusive information. We might quote page after page to show that, so far from the Bengali and Behari peasantry having been

may be shown to be *a priori* unlikely. Self-reliance on great

demoralised by the relief operations, they really seem to have learnt from recent events an admirable lesson of forethought and energy, more effectually than they could have been taught in any other way. The facts and experiences detailed in the report are absolutely conclusive on the point; but we have only space here for one or two extracts. Speaking of the period of the setting-in of the rains in 1874—the turning-point of the famine—Sir Richard Temple says: “During this period it became apparent that, in the distressed districts, the agricultural classes, ordinarily prompt and industrious on the occasions when a change in the season favours their work, were on this occasion putting forth extraordinary efforts. The land was ploughed and prepared with remarkable rapidity. The husbandmen seemed possessed with a desire to free themselves from dependence on the State by resuscitating their own means of subsistence An unusually large area was sown with those crops—the early varieties of rice, the maize, the coarser millets and pulses—which could be reaped in August, and which would yield the speediest return. Much land was sown with these crops, which, from exposure to inundation, was not properly suited for them, and in which there was consequently great risk of the produce being destroyed. Still the cultivators ran that risk in the hope of obtaining resources by an early date. So intent were the people on the early sowings, that doubt began to arise as to whether due attention was being given to the preparations for the main rice crop to be reaped later. It was soon found, however, that this crop was being sown to the fullest extent possible.

Fear had sometimes been felt lest the administration of relief on a great scale should tend to demoralise a people chiefly agricultural, and to relax their zeal for husbandry. Such fear was immediately dissipated, in-

asmuch as the severe lessons of the famine had evidently taught them to work harder than ever, and to make the most of the first chance afforded to them by the seasons for recurring to self-help.”

Again, “There has been no demoralising effect whatever visibly produced on the labouring classes. It is true that in the distressed districts these classes were for several months employed on the relief-works. A small portion of them consisted of professional labourers, who work for hire in road-making and similar occupations. This limited class certainly made good earnings by the piece-work system; but as they did this by industry superior to the average, there is no reason to regard them as demoralised thereby. They were among the first to be discharged from the works as soon as the season changed for the better. They will, doubtless, labour in the future on public works and the like, much as they have laboured in the past. But the real bulk of the relief-labourers consisted of the lower classes of ryots and cultivators and the field labourers. In chapter IV it was shown that although the system of daily wages, unavoidably adopted as a temporary expedient, had demoralising tendencies, the system of piece-work which was speedily substituted and finally adopted, had not any such tendencies but quite the reverse. It is believed that these people, so far from being demoralised, were actually improved in morale by the system which was adopted. After the setting in of the rains the matter became one of demonstrable fact. For in what did the ordinary work of these classes consist? Agriculture. After the rains set in, was there any reluctance on their part to return to their field? Was there any slowness to sow? Was there any contraction of the average area of cultivation? Was any land ordinarily tilled left untilled? Was the first or autumn crop badly raised,

occasions, in times of danger or emergency, when the more heroic virtues are called into play, is doubtless more characteristic of the English peasant with his powerful *physique* and his strong nervous system, than it is of the Bengali with his delicate body and his weak nerves. But on the other hand, the more passive virtues that are ordinarily exerted in the daily earning of a humble livelihood—patience, perseverance, frugality, temperance—are generally believed to belong to the lowest classes in Bengal to a far greater extent than to the same classes in England. Again, that keen regard for the public opinion of their little society, which is ridiculed by Mr. Matthew Arnold (under the name of “respectability”) as one phase of Philistinism in the British middle classes, is almost totally wanting in the lowest classes at home; but in India it is all-powerful, even among the very lowest. All these considerations obviously tend to diminish the danger of demoralisation from Indian poor-relief. Of course, as in England, so in India, and, indeed, in any other country, demoralisation will ensue if the method of relief be not properly and judiciously arranged; but we fully believe—and we know the belief to be shared by those most competent to form an opinion on the subject—that the late famine arrangements were as perfect in this particular as the nature of the case admitted. Doubtless, the infirm and the helpless poor were relieved, as they ought always to be relieved, with as few vexatious and shameful restrictions as possible; but from the able-bodied, and even from women and children where it was right and proper, a full return in labour was exacted for the food that was supplied*.

tended, and gathered? Was the second or winter crop indifferently sown or inefficiently transplanted? Now all of the above questions, and any similar questions that could be put, may be answered emphatically in the negative. Never have these important things been done better by the people than during the summer and autumn of 1874. Though some persons here and there may have, during June last, been charged with unwillingness to quit relief, yet as a whole they have evinced a degree of alacrity and industry never surpassed by them within living memory. Such being the case, it is hard to see how they can have been in any way demoralised. On the contrary, they have, probably, learned a lesson regarding the vicissitudes of season and the expediency of losing no chance of self-preserva-

tion by skill and promptitude.”

* We are again able to quote from Sir Richard Temple's report the fullest confirmation of what we have said in the text. The following is from that part of the fourth chapter which treats of the way in which pay was distributed on the relief-works:—“These people had been paid on the plan of daily wages, which meant that a person—man, woman, or child—should labour all the working hours of the day, and receive a daily wage at rates fixed for men, women, and children, respectively. The rates being hardly higher than those of ordinary times, were very low in places of dearness and scarcity. This plan, though applicable to limited numbers, was found, when applied to very large numbers, to militate against any effective supervision by measuring up of work

We come lastly to the remaining point which we have proposed to consider in this paper—the interference with private trade

actually done; to fail in offering a reward to industry or imposing a penalty on idleness; to give birth to many petty abuses, and especially to afford opportunities of wrongful gain to gangmen who had to be selected from among the people themselves for watching the work of the gangs. During the first rush, crush, and stress of relief affairs, the introduction of the piece-work plan (which is much preferable) had not been practicable, but it was resolved to take the earliest safe opportunity of introducing it. The piece-work plan meant fixing a rate of payment for a specified amount of earth-work, measuring up the work actually done, and paying accordingly. The terms first proposed for the piece-work were quite liberal as compared with those which would be allowed in ordinary times, and even in those hard times admitted of a tolerably able, industrious, and skilful person earning a subsistence. They were, however, hardly liberal enough in regard to the severity of out-door toil in the hottest season, to the induration of the parched-up soil, to the feebleness and inaptitude of many of the people, and to the large proportion of women and children in the gangs. When they were promulgated, the ignorant people imagined them to be so hard as to preclude an ordinary untrained villager from earning subsistence under them. This notion was fostered by the gangmen, who thought by passive resistance to stop the substitution of piece-work for the daily wage, and thereby to prolong the opportunity of their own illicit gains. So they persuaded the people that to attempt piece-work on the roads was to fail to obtain sufficient food, and that it would be better to stay at home and languish there than to starve abroad. In many cases they even insinuated that the Government was tired of supporting the people, and that the piece-work was only a pretext for making the

relief-labourers leave the roads, and so for closing the works. All this resulted in the people deserting the works in very large numbers. The total number of persons who thus deserted in various places and on various dates about this time was not less than 350,000. A certain number, some thousands in all, who were either professional earth-diggers, or were apt at labour, remained on the roads to do the piece-work. For a while it was naturally believed that the hundreds of thousands of deserters must all come back to the works, inasmuch as they had no other means of living. But soon the relief circle officers reported that tens of thousands of persons having left the roads had returned to their homes and were staying there in apparent destitution, perhaps under some misapprehension. It was found on enquiry that these people were existing on the verge of starvation, under the idea either that they had no chance of earning their bread on the roads, or else that the works had been closed against them. Unless some remedy were immediately adopted, extensive mortality must ensue. These misapprehensions were soon rectified, and the labourers were too glad to return to work and pay. Opportunity was taken to render the terms of the piece-work more liberal, and the local authorities gradually, but firmly, substituted this system for daily wages almost everywhere. At the same time the wages were paid in grain. So many pounds of rice were given for so many cubic feet of earth-work measured up.

After a time, the effect of this change was visible in the behaviour of the relief-labourers; they found on trial the premium which piece-work offers to the industrious who choose to work during extra hours. Practice first improved their skill and aptitude. The long summer days enabled them to labour for many hours out of the twenty-four, and so to earn an amount from which they

which is sometimes said to be inseparable from Famine Relief. It is, of course, true that (to quote Mill's phrase) "the union of all merchants can do more than the Government, though the Government can do more than any one merchant;" and consequently it will often happen that Government will do more harm than good by bringing food-supplies into a distressed province, for it is possible that such a measure will paralyse all private trade. But there is a limit to this as to all similar propositions in political economy. For private trade in grain to be active (or even to exist) in any district, it is, of course, absolutely necessary in the first place that the price of grain in the district should be sufficiently high to cover (1) the original cost of the grain, *plus* (2) the cost of carrying it to the distressed district, *plus* (3) the profit of the trader on the whole operation, including the three items of interest, insurance, and wages of superintendence. In the second place, it is also equally necessary that the people should possess sufficient money to purchase the grain at the high prices required by the former condition. Now it is perfectly obvious that unless *both* these conditions are fulfilled, private trade must languish and die, the people must starve, and the traders will be involved in the common ruin. And can any sane person believe for a moment that these conditions could have been fulfilled during the late famine, let us say in the remote districts of Behar? There can be no doubt about the first condition having been fulfilled—prices would have been high enough to attract all the rice of India and Burmah, if things had been let alone, and if a sufficient number of purchasers could have been found; but what proportion of the population of Behar could have become purchasers at such rates? It may be said that

could find present sustenance, and save something against the rainy season when the works would be closed. Many men, whose wives and children had been working on the roads, would now earn alone enough for the household, and would keep their families at home. Very many, too, managed to earn in a few hours enough for daily food, and spent the remainder of the day preparing their arid fields in the hope of showers. The majority of the people were spurred and stimulated to a degree of perseverance and energy, which would hardly have been credited had it not been fully demonstrated. Despite incessant toil in the fierce heat, the physical condition of the mass improved week by week. As their

labouring and earning powers increased, it was thought safe for them, and just to the State, to render the piece-work terms somewhat harder. To this they submitted without complaint. The piece-work system was seen to be open to one particular objection, in that a practised or professional workman earns more than need be allowed to him as relief. Any terms which are favourable enough for the unskilled and inefficient (who are the great majority), must prove too favourable for the skilled few. It was decided that this objection could not be obviated, and that no exception could be made as against these individuals, especially as their example instructed the mass of the relief-labourers in workmanlike habits."

relief-works would enable the people to buy at these prices, and therefore save their lives without any Government importation of grain; but what would become of the portion of the population unable from various causes to labour on these works? Their case would now be worse than ever, for the money thrown into the province in the shape of wages for relief-work would *pro tanto* still further raise the price of grain. Even if these wages are paid in grain, as has been the case in the late famine, the case of the non-effectives is as bad as before; moreover, the importation of grain for this purpose is (as far as it goes) just that interference with private trade which is blindly* deprecated.

The truth is, that whilst private trade should undoubtedly be encouraged as much as possible, it *must* also be supplemented in any place where the cost of bringing supplies from a great distance and in the face of great difficulties renders the natural price of food such as to put it absolutely beyond the reach of the people. And this was unquestionably the state of affairs last year in the distressed districts of Behar and Bengal.

The form in which we have just stated the conditions on which the price of food in any remote district must depend, enables us at the same time to see clearly in what way Government may best *assist* private enterprise. It obviously lies in doing as much as possible to cheapen the cost of carriage; and this points, in the first place, to that which we have already described as the chief glory of Sir Richard Temple's famine administration—the provision of means of transport. The reduction of the railway rates for carriage of grain—the loss being, of course, made up from the public revenues—was a measure dictated by the

* The blind and utterly inaccurate nature of most of the criticism to which we are here referring, has been fully exposed by Sir Richard Temple's report. Not only have no complaints been received from dealers of their trade being interfered with, but many of the shrewdest have loudly expressed their gratitude to the Government for having preserved their very means of subsistence by preserving the lives of their customers. Perhaps, one of the most absurd of all these criticisms is one that has lately been "ventilated" in some of the Anglo-Indian journals, to the effect that Government interference was either unnecessary or ineffectual in Behar, because prices there did not differ much from those ruling in some adjacent districts of the North-West

Provinces. The fact, to the mind of any impartial observer who is at the same time competent to form an opinion on the subject, proves two things:—*First*, that prices in Gorakhpur and the adjacent districts of the North-West must have risen to famine-rates, but for the Government operations in Behar, *which alone have saved the North-West from a terrible disaster*; and *secondly*, that the Government arrangements in Behar were so judiciously made, by proportioning the relief given to the various districts exactly according to the varying extent of the distress, that the effect was to equalise the pressure over a large space even beyond the actual limits for which the arrangements were in the first place made.

soundest scientific principles; and it has been attended with the happiest results. The private grain trade,* instead of being paralysed by the Government operations, has been actually more brisk than usual; the prices ruling being sufficient to remunerate the private trader when aided by this encouragement, without being so high as to preclude all purchases.

We have now dealt in turn with each of the more important objections that have been urged against the recent Government measures; and for each we have endeavoured to show that, though put before the public in a scientific guise, it has no true scientific basis. We have not attempted the discussion of many minor points of detail; with regard to which the experience now gained will doubtless be found invaluable when a similar calamity befalls the country, but which involve no important principles. Nor have we touched upon many points which really do involve important principles, such as the importation of food from distant centres like Burmah and Saigon, and the advances of seed-grain to the ryots, simply because in these the propriety of the Government measures has never, as far as we know, been controverted. With regard to the questions that have been the subject of controversy, we have endeavoured to show clearly and impartially what we believe to be the true teachings of political economy. We have also adverted to that which we believe to be the most valuable political lesson of the great famine year—the paramount importance of a rapid development of the railway system and other means of communication throughout this empire, which alone can avert such terrible contingencies and the necessity for such a heavy expenditure. He is the best economist, as well as the greatest statesman, who boldly faces the national duty and prepares to fulfil it in the best way that science and experience can suggest†—not he who vainly tries to refine away all

* We believe that there are few of the critics with whom we have been dealing, that will not be startled by the figures given in Sir Richard Temple's report. It appears from the best estimates that can be formed, that more than 500,000 tons of grain—or considerably more than the whole Government provision—have been poured into the distressed districts by private enterprise! So much for the disastrous results of Government interference. The remarkable forethought and sagacity displayed by Sir Richard Temple's policy in matters of detail were perhaps nowhere more apparent than in the arrangement by which the

chief strength of the Government was put forth in localities remote from the railway, which were consequently not so easily reached by private dealers. The distressed districts accessible from the railway were almost entirely provided for by the latter.

† Sir Richard Temple well says in his report: "We may hope that these provinces may, under Providence, long be spared such a visitation in the future; but at the worst, we must meet famine as we should meet war." The same spirit of resolute forethought pervades the whole of the Resolution of the Government of India—Lord North-

responsibility by the shifts and contrivances of a spurious philosophy:—

God calls for Famine, and the meagre fiend
Blows mildew from between his shrivell'd lips,
And taints the golden ear. He springs His mines,
And desolates a nation at a blast.
Forth steps the spruce philosopher, and tells
Of homogeneal and discordant springs,
And principles ; of causes how they work
By necessary laws their sure effects ;
Of action and re-action.

We have seen of late in the Anglo-Indian Press, enough and more than enough of the "spruce philosopher," with his "homogeneal and discordant springs," and all the abracadabra of the political charlatan ; is it too much to ask that questions of vast importance to the Empire, and indeed to the cause of humanity at large, may be discussed in the spirit of earnestness that befits men of thought as well as men of action? In no other country in the world is that flippancy in the treatment of great questions, which has of late been somewhat fashionable with many of our newspapers, so much to be deprecated as in India. The small body of Englishmen in the country can of course understand the flippancy ; and may be amused, if they are not shocked, by it. But these flippant utterances are not unfrequently translated into the native papers, and are occasionally copied into journals at home ; and in each case they are submitted to an audience utterly incapable of gauging their true value. In the present case their probable effect on the native mind is especially to be deplored. Judged in the light of the facts and experiences of the late famine, the British rule, and its personifications in Lord Northbrook and Sir Richard Temple, must appear, and rightly appear, "as the *avatárs* of a divine and benignant force," * to the eyes of the people of Bengal, and indeed of India in general. The moral and political value of such a noble example on the one side and of such cordial appreciation on the other, can hardly be overrated ; and it would unquestionably be a matter for the deepest regret if these good impressions were to be marred by the idle and unjust cavillings of irresponsible wiseacres. It was once said by a good authority, that the chief function of the Press in India, if it does its duty, is to enact the rôle of Her Majesty's Opposition ; but it should never be

brook significantly says, "As railway communication is extended, the probability of Government being called upon to interfere in this manner with the functions of trade will

diminish." If we are not mistaken, this sentence strikes the key-note of the future policy of the Government, a policy as wise as it is humane.

*The *Saturday Review* on the Famine.

forgotten that opposition degenerates into faction when it becomes captious and unjust. Let us honestly give credit where credit is unquestionably due. Lord Northbrook and Sir Richard Temple, aided by many officials and by as many non-officials, have achieved a glorious triumph—none the less glorious for having been a triumph of peace and humanity, and achieved without any of those horrors that attend a great military triumph; and the story of this triumph will be told as long as the memory of our rule in India endures.



CRITICAL NOTICES.

1. VERNACULAR LITERATURE.

The Analogy of Religion. Part I. Of Natural Religion. By Bishop Joseph Butler. Translated into Urdu, with a brief Life of the Author and Explanatory Notes. By H. R. Williams, St. John's College, Agra. Agra: 1874.

THIS excellent translation is one of the many valuable results of the noble efforts made by Sir William Muir to encourage the production of a sound vernacular literature in the North-West Provinces. The work of translating Butler's *Analogy* is obviously a most difficult one, not only on account of the abstruse and involved nature of the arguments, which demand the utmost precision of language to be intelligible even to the most philosophical reader; but also because of the great difficulty there is of preserving the exact shades of meaning in the various philosophical terms employed. For instance, the difficulty is great of expressing in Urdu clearly and without unwieldy paraphrases the exact difference between the meanings of such common philosophical terms as "consciousness," "perception," "sensation." In the new and revised edition of his work, Mr. Williams has been very careful to preserve a strict uniformity in his use of the Urdu equivalents for such terms; and he appears to us to have achieved a high degree of success. The faithfulness with which he has elaborated every idea of the original is worthy of all praise; the most long and sustained arguments can, we think, be followed in the translation almost as easily as in the original. The first part of the *Analogy*, dealing only with natural religion, can be read not only without offence but with a great deal of advantage by persons of every creed; consequently this book is admirably suited to the reading of students in the higher vernacular and normal schools of the North-West.

Prabandhāvalī. A translation of Bacon's *Essays*. By Dharmadās Adhikāri. Bhavānipur: Sāptāhika Sambād Press: 1874.

ALL Bengali undergraduates while studying Bacon at College must have felt a desire that their fellow-countrymen not having the same opportunities, had some means of being acquainted with the effusions of the founder of inductive philosophy. We have no hesitation, therefore, in welcoming this book as the

first attempt towards giving the Bengali student an insight into the vast store of practical wisdom contained in the works of Bacon; though we are at the same time sorry that the book is not what we expected it to be. It is not the faithfulness of a translation that is praiseworthy, but the elegance of the language and the case with which the sentiments of the original author win their way into the heart of the reader. Pope's *Iliad* is more liked by the general reader than that of any other, simply because he did not trouble himself much about finding out the best mode of translating Greek idioms. True, the poetic fire of Homer is lost in the effeminate version of Pope; still, the translation is so thoroughly English that students unacquainted with Greek cannot help admiring its beauty. But with all his foreignness Homer was a poet as well in his style as in his imagery. This could not be said of Bacon, whose style is extremely sententious and brief, and interspersed here and there with Latinisms. To convey the sentiments of such a writer to the reader unacquainted with English, requires in the translator not only a complete mastery of the peculiarities of Elizabethan literature, but also a power of expressing himself with fluency and ease in his own language. We have carefully compared this book with the original, but judging by the above criterion, found it wanting in many respects the requisites of a good translation. The language, though in some places eloquent, is in general somewhat rough, and the injudicious mixture of high-sounding Sanskrit words with colloquialisms has made the style extremely defective, and the meaning in some places so obscure that the Latin quotations of Bacon seem easier than the Bengali translation. The author has promised in his preface to add some explanatory notes in his second edition, which we recommend him to do as soon as possible, for his little book in its present shape will not be of much use either to students in the Vernacular Schools or to grown up men who read for the sake of instruction and amusement.

Sekála ár Ekála (The Old Age and the New). By Babu Raj-nárayan Basu. Válmíki Press, Calcutta: 1281 B.S.

THIS excellent little book, like all that issue from Babu Raj-narayan's pen, is well written and full of merit. In it our author has sketched out a short history of the past and the present order of our society, marking chiefly the difference in the effect produced thereon by the introduction of Western education into the East. We can hardly name a native reformer, Pandit Vidya-ságara excepted, who thinks so liberally of the manners and customs of his own nation and weighs so accurately the evils existing in them, and the remedies that are proposed for their

cure, before venturing upon any innovations, as the author of the book before us. He would never be found crying for quarter for anything that is evil in our society; but he would never, without due deliberation and long reflection, upset the existing order of things: he would patiently wait till time tells him not only the hour and nature of the reformation to begin with, but also the method whereby to carry it into practice. It would be absurd criticism to say that the book leaves many things half-finished and undone; the wonder is how exquisitely the author has marked out the line between the old and new age within so short a compass. His old age refers to the period preceding the establishment of the Hindu College, and his new to that following it. This period has been entitled *new*, because of the new influences since growing in our society, strengthening it and regulating its progressive advance. The book contains much information that is very useful; and will serve as a faithful guide to all those who feel an interest in noting the progress which our society has made during the last four decades. In the very beginning we are told how amicably and freely the *Sahibs* of the bygone days used to mix with the dark complexioned natives of the country, the absence of which freedom is now so universally deplored both here and at home; how those benevolent persons, defying the effects of the trying Indian climate on English constitutions, unceasingly did their utmost to contribute to the noble work of India's moral and intellectual regeneration; how great was their success, and how the natives will fondly cherish their memory and merrily sing, in token of gratitude, the lines

হেয়ার কখিন্ পামরাশচয় কেরি মার্শমেন স্তথা পঞ্চ গোরা স্বরনিতাং
মহাপাতক নাশকং ॥

In page 12 our author has very feelingly deplored the growing duplicity and insincerity of the natives with regard to their religious beliefs:—

সে কালে ধর্ম বিষয়ে ভিতরে একখানা বাহিরে একখানা এরূপ ছিল না। একপে যেমন দালানে পূজা হইতেছে, টেবটকখানায় মদ্যপান ও উইলসনের দোকানের খানা চলিতেছে, অন্তরে দেব দেবীতে বিশ্বাস নাই, কিন্তু সমস্ত রক্ষার জন্য বাহ্য ঠাট বজায় রাখিতে হইবে, সেকালে এবস্তৃত ব্যাপার দৃষ্ট হইত না।

To speak the truth, we are perfectly at a loss to understand whether such queer advertisements as 'Prime York Hams in canvas just in time for the Pooja,' are intended for the European residents or the Babu-*Sahibs* of the town. As regards the state of English education before the dawn of the new age, we can form an adequate idea of it by looking at the specimens

of translations given at some length in the book under review. Here is specimen No. 1, 'Master can live, master can die,' meant মনিব আমাকে বাঁচান্নে রাখিতে পারেন, অথবা মারিয়া ফেলিতে পারেন।; and when a public *amlah* using the above was taken to task to explain it to his master, he corrected himself thus: 'Master can live, master can die *me*!' Specimen No. 2 is a description of the Hindu *Ratha* festival. 'Ratha,' said one of the English students of those days, is a wooden church, three stories high, God Almighty sit upon, long long rope, thousand men catch, pull, pull, pull, run away, run away, *Haribal, Haribal*! Our educated youths of the present day would blush to be reminded that their ancestors used to violate the sovereign language so ruthlessly.

2. GENERAL LITERATURE.

The Theistic Annual for 1875. Published on the occasion of the Forty-fifth Anniversary of the Brahmo Somaj. Edited by P. C. M. Calcutta: 1875.

THE Theistic Annual is the recognised organ of the Bráhma Samáj; and serves both as a yearly record of the progress of that remarkable movement, and as the vehicle of the thoughts of some of its best supporters. Well written and admirably edited, it is worthy of the high literary reputation of Bábus Keshub Chunder Sen, Pratap Chunder Majumdár, and the other Bráhma leaders. It is also well supported by contributions from English theists; the 1874 *Annual* contained papers by Miss Frances Power Cobbe, Mr. Voysey, and Mr. Amherst D. Tyssen. We are free to confess that we do not sympathise with some of the views expressed in these papers; but of the general aims of the Bráhma Samáj, and of the value of the work of such men as Bábus Keshub Chunder Sen and Pratap Chunder Majumdár, we have the highest appreciation; and we are glad to see by the records before us that that noble work is prospering and likely to prosper.

By far the most interesting paper in the present number is Bábu Pratap Chunder Majumdár's account of his mission to Europe. The Bábu, like his predecessor in the same mission, is evidently a man of powerful and original mind, with a deep and earnest conviction of the reality and importance of the faith that is in him. He was much impressed by the warmth of the sympathy shown to him and to his reform movement by all sections of the English community; and some of the remarks he makes upon public men and public bodies are characterised by great

shrewdness and a singular insight into character. In his opening paragraph he brings out into clear light a most important feature in the relations of the Bráhma Samáj to other theistic communities in the world—a point that appears to have been too much overlooked by many of the Bráhmie leaders—viz., the difference between the constructive, and reforming, and *believing* character of the Indian movement, and the destructive and sceptical nature of the others. On this he says:—"The theism of the Bráhma Samáj is really very different from what passes by that name in other parts of the world But still one cannot fail to be struck with the dry, speculative, critical, and negative character of what is commonly called theistic preaching in England. The frequent attacks made upon orthodox Christianity of all denominations, naturally alienate the sympathy of those who still like to be bound to the old faith of the country." We look upon the clear recognition of this great fact by a leader of Bábu Pratap Chunder's influence amongst the members of the Bráhma Samáj, as one of the most remarkable and valuable advances yet made in the development of the movement; and we earnestly commend his words to the careful consideration of his co-religionists. The Bábu's descriptions of English "evening parties" and Exeter Hall meetings, and of such public men as Mr. Martineau, Father Newman and his brother, Max Müller, and Dean Stanley, are graphic, and most interesting as giving a candid account of the impressions of an educated and liberal-minded Indian gentleman on first going into English society.

Another thoughtful and well-written paper in this number of the *Annual* details the "development of the Bráhma Samáj;" and there are others that reach a high standard of excellence. The Magazine may be read with interest and profit, both by the members of the religious community for whom it is primarily intended, and by all who take an interest in the moral regeneration of this country.

Málavikágnimitra. A Sanskrit Play by Kálidása. Literally translated into English Prose, by C. H. Tawney, M.A., Professor of the English Language, Presidency College, Calcutta. Thacker, Spink & Co., Calcutta: 1875.

THE late Professor Wilson attempted to prove that the *Málavikágnimitra* was not really the productions of the great Kálidása, and that it was written at some period not earlier than the tenth or eleventh century after Christ. The learned Weber has, however, fully refuted this theory; and we may now accept the play as genuine, and as giving us a vivid picture of a native court in the most flourishing period of Indian history—probably

about the third century A.D. The plot of the play is well known. The love of King Agnimitra for Málaviká, the attendant of his chief Queen, reminds the English reader of King Henry and the fair Anne Bullen; and the jealous Queen of Kálidása may fairly be compared with poor Kate of Arragon. The difficulties caused by the modesty or coyness of the lovely Anna and by the desire of Henry VIII. to preserve at least a semblance of decorum, are like those which form the plot of *Málavikágnimitra*; except that here it is the excessive timidity of the king and the watchfulness of Queen Irávatí that keeps the king straight, rather than any scruple on either side. In the end all comes right; for Málaviká succeeds in mollifying her mistress by performing an important rite for her, and ultimately turns out to be a Princess—on which she is installed by the chief Queen as a junior in the same dignity, much to the delight of Agnimitra who has been much exercised by Queen Irávatí's tirades on the subject. The European reader will, of course, bear in mind, in forming an opinion on the morality of the play, that the whole proceeding was quite in accordance with the strictest propriety, amongst a polygamous people; and that the king's love-affair had nothing in it that could be objected to, except the difference in the rank of the parties, and the unkindness of the cut to the elder queens.

The translation is executed with the accuracy and the spirit that always distinguish Professor Tawney's work. The speeches of the *Vidúshaka* (a character whom Mr. Tawney aptly describes as "the Leporello of the Indian drama"—he is the jocose friend and companion of the king, and is always represented as a Bráhman) are rendered in a particularly happy way. The sprightliness of his familiar speeches to the king in private, the droll combination of cunning impertinence with a wholesome fear of consequences that is observable in his manner to the vixenish Irávatí, and the dry humour of his addresses to the king and the queens in public, are admirably brought out. Mr. Tawney, who evidently works here *con amore*, is a master in the art of delineating the finer shades of humour; the playfulness of Kálidása loses nothing in his hands. He is hardly less successful in representing the feminine spite of Irávatí, some of whose speeches remind one of Douglas Jerrold's *Mrs. Caudle* in their perversely ingenious taunts and jibes. With all this, Mr. Tawney adheres closely to the original Sanskrit. His style, however, is so pleasant, notwithstanding this burdensome restriction, that the general reader will be able to forgive the student, for whose benefit it is done; but will at the same time wish to see something in the shape of an original drama, or at any rate a free translation, from the same artistic hand.

The Oriental.—A Monthly Magazine, devoted to the affairs of India, Turkey, Central Asia, Burmah, China, Japan, the Straits, Australasia, &c. Edited by J. H. Stocqueler. Trübner & Co., London.

WE have now before us the nineteenth number of this interesting and useful Magazine. That it is edited by Mr. Stocqueler, emphatically the Nestor of the Indian Press and the most successful journalist that ever sojourned in India, is a sufficient guarantee of its excellence; and the uniformly high character of the articles in the present number is really remarkable, considering the wide range of topics. The list is worth reciting:—(1) "Dr. John Forbes-Watson," (an appreciative article in which, we think, we detect the well-known hand of the Editor); (2) Eastern Proverbs (a paper that will delight our old friend Mr. Long, if it be not actually from his pen); (3) A Day in Camp and Cutcherry, by Colonel Meadows Taylor (part of a series of graphic descriptions, in which we recognise the pleasant ring of *Tara and Seeta*); (4) Darwinism and Language; (5) A Journey to the Diamond Fields of South Africa; (6) "Scandalously Unjust," a vigorous article on the scurvy treatment of India in the adjustments between the India and War Offices; (7) Notes from the Journal of a Tour in the North of China, by Dr. James Legge, one of our foremost Sinologists; (8) A Review (by Mr. Pincott) of Hodgson's "Essays on the Languages, Literature, and Religion of Nepal, Thibet &c;"; (9) Health of the Treaty Ports in China; (10) Gossip about Ceylon, one of a series of papers on Ceylon, by Dr. Knighton; (11) The Protected States of India, by A Boundary Officer; (12) Sir George Campbell on Vernacular Education (this is, perhaps, the best article in the number, and exposes in a trenchant way the fatuity and recklessness of our late Lieutenant-Governor's educational policy); (13) The Moral and Material Progress of India (a useful *résumé* of the Annual Blue-book); (14) The Contemporary Press (a selection); (15) Editorial Notes; (16) Current History; (17) A Storehouse of Facts. It will be seen that in this list, there is something to interest every Englishman who lives or has lived in any English settlement in east longitude—India and China naturally engrossing the lion's share of attention. The annual subscription is only £1-6-0 including British postage, or £1-12-0 including foreign postage. If Mr. Stocqueler's subscription-list is not already a very long one, we are quite sure it will soon become so, if he continues to provide his readers with such attractive fare.

Vocabulary of Dialects spoken in the Nicobar and Andaman Isles ; with a short account of the Natives, their Customs and Habits, and of Previous Attempts at Colonisation. By Fr. Ad. de Röepstorff, Candidate of Philosophy, University of Copenhagen ; Fellow, Royal Society, Northern Antiquaries, &c. ; Extra-Assistant Superintendent, Andaman and Nicobars ; late in charge of the Nicobars. Calcutta : Office of the Superintendent of Government Printing, 1875.

MR. DE RÖEPSTORFF has done for the Nicobar and Andaman Islanders just what Mr. Bryan Hodgson did for the Himálaya mountain tribes. His work is, in some respects, even more important than the generality of such researches, for many of these island dialects are rapidly passing away from the face of the earth, and unless they can be seized and made to deliver up their philological treasures now, they will soon be lost to science for ever. Philologically, the value of a rude dialect, such as those here unearthed, is as great as that of the most elaborate and highly polished speech on the face of the earth, as showing another but not less remarkable stage in linguistic development. A similar value attaches to the other part of Mr. de Röepstorff's work from the point of view of sociology. We hope in a future number to attempt a minute and critical examination of the results of these most valuable researches ; in the meantime we commend the work to the careful consideration of our philological readers.

Notes on Western Turkistan. Some Notes on the Situation in Western Turkistan. By G. R. Aberigh-Mackay. Calcutta : Thacker Spink & Co., 1875.

IN this little book Mr. Aberigh-Mackay has collected, from a vast number of independent sources, pretty nearly everything that is known, and a great deal of what has been surmised, about the topography, history, and political and social condition of the three great Khanates of Central Asia—including a chapter on *Russian Advances*, and another on *England and Russia*. The last two chapters give an account of the recorded opinions of nearly every authority that has ever written or spoken on the great Central Asian question ; the latter chapter especially containing a body of information which appears to be thoroughly exhaustive. Not the least useful part of the work will be found in the *appendices*, especially the chronological table, and the lists of books, articles, and maps to be consulted. It will be unsafe for any one in future to write or even to speak on any subject connected with Central Asia without having first mastered Mr. Aberigh-Mackay's wonderful storehouse of facts and opinions.

The Antiquities of Orissa. By Rajendralala Mitra, Honorary Member of the Royal Asiatic Society of Great Britain and Ireland, and of the Imperial Academy of Sciences, Vienna; Corresponding Member of the German and the American Oriental Societies, and of the Royal Academy of Sciences, Hungary; Fellow of the Royal Society of Northern Antiquaries, Copenhagen, etc., etc., Calcutta: Wyman & Co., 1875.

“LONG looked for, come at last!” This will be the sentiment of most Orientalists, on at length getting possession of the first volume of this truly magnificent work. The scientific mission to Orissa—one of the best things ever done for science by Her Majesty’s Indian Government—was carried out in the cold weather of 1868-69, and was accompanied by Bábú Rájendralála Mitra as archæologist; and ever since that period the scientific world has been looking with some impatience for the appearance of the promised work on the *Antiquities of Orissa*. The Bábú’s great and varied learning, which has long ago placed him in the very front rank of Oriental scholarship—his known predilection for the particular line of research in which the Government had been so fortunate as to secure his services—and the remarkable facilities that he has had for making these researches as thorough as possible—all these things have combined to raise the expectations of the world of Orientalists to a very high pitch.

The first instalment of this great and thoroughly national work—a superb royal quarto, most beautifully printed and bound, and richly illustrated in a very high style of art—has reached us just before going to press; and though we obviously cannot attempt to present our readers with anything like a review of it in our present issue, we hasten to express our full conviction that Bábú Rájendralálá’s *magnum opus* will amply fulfil all the high anticipations that have been formed about it, and more. The introductory chapter contains a masterly review of the whole subject; whilst the succeeding chapters, as far as we can judge by a rapid inspection, enter fully into the architectural and other antiquarian details in a way that will delight artists and antiquarians alike. The history of the manners, religion, dress, &c., of the ancient inhabitants of Orissa as evolved from their sculptured remains, strikes us as particularly scholarly and truthful. The illustrations have been executed by the students of the Calcutta School of Art, under the superintendence of Mr. Locke; and well maintain the high reputation that Mr. Locke’s pupils have already gained by their beautiful and artistic illustrations of Dr. Fayer’s *Thanatophidia* and other equally creditable works. In every way this splendid volume reflects the highest credit on every one concerned in its production—on the gentleman whose ripe scholarship and learned pen are in the first place to be thanked

for it, on the artists who illustrated it, on the Indian press (the Baptist Mission Press) that has printed it, and Messrs. Wyman who have published it, in a style hardly seen in India before, and on the Government under whose auspices it has appeared. We hope to return to a full examination of it in an early number.

